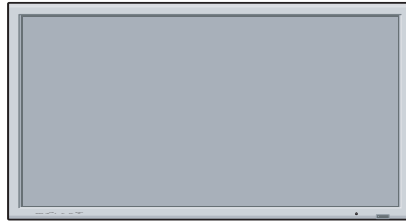


# Service Manual



PDP-42MXE20

ORDER NO.  
**ARP3438**

PLASMA DISPLAY

# PDP-42MXE20

**THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).**

Model	Type	Power Requirement	Remarks
PDP-42MXE20	TYVXK5	AC100 to 240 V	

**This service manual should be used together with the following manual(s).**

Model No.	Order No.	Remarks
PDP-425CMX/LUC5, 42MXE10	ARP3340	EXPLODED VIEWS, BLOCK DIAGRAM, PCB PARTS LIST etc.
PDP-425CMX/LUC5, 42MXE10	ARP3341	SCHEMATIC DIAGRAM, PCB CONNECTION DIAGRAM



For details, refer to "Important Check Points for good servicing".

# SAFETY INFORMATION

## Leakage Current Cold Check

With the AC plug removed from an AC power source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (input/output terminals, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of  $4M\Omega$ . The below  $4M\Omega$  resistor value indicate an abnormality which require corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

## Leakage Current Hot Check

Plug the AC line cord directly into an AC power source (do not use an isolation transformer for this check).

Turn the AC power switch on.

Using a "Leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (input/output terminals, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 1mA.

## PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in PIONEER set have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\Delta$  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

## LITHIUM BATTERY NOTICE

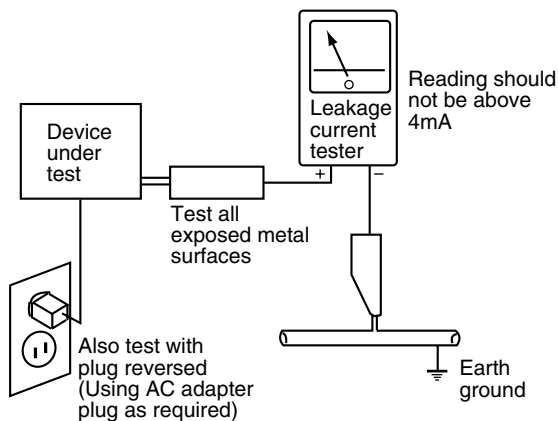
### CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

When replacing the lithium batteries, follow the note below. Dispose of the used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.

The battery used in this device may present a fire or chemical hazard if mistreated. Do not recharge, disassemble, heat above  $100^{\circ}\text{C}$  or incinerate. Replace only with the same Part Number. Use of another battery may present a risk of fire or explosion.

Note : The lithium battery installation position is shown in the exploded views.



AC Leakage Test

**ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE SET TO THE CUSTOMER.**

## [Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol. Please be sure to confirm and follow these procedures.

### 1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification (addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris. Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs. In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages. If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries. Please pay attention to your surroundings and repair safely.

### 2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification. Adjustments should be performed in accordance with the procedures/instructions described in this manual.

### 3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance. Make sure the proper amount is applied.

### 4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

### 5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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# 1. CONTRAST OF MISCELLANEOUS PARTS

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

● The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part.

Therefore, when replacing, be sure to use parts of identical designation.

● Screws adjacent to  $\nabla$  mark on product are used for disassembly.

● Reference Nos. indicate the pages and Nos. in the service manual for the base model.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560  $56 \cdot 10^1$  561 ..... RD1/4PU  $\boxed{5} \boxed{6} \boxed{1} J$

47k  $47 \cdot 10^3$  473 ..... RD1/4PU  $\boxed{4} \boxed{7} \boxed{3} J$

0.5 R50 ..... RN2H  $\boxed{R} \boxed{5} \boxed{0} K$

1 IR0 ..... RS1P  $\boxed{1} \boxed{R} \boxed{0} K$

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k  $562 \cdot 10^1$  5621 ..... RN1/4PC  $\boxed{5} \boxed{6} \boxed{2} \boxed{1} F$

## 1.1 CONTRAST TABLE

### ● CONTRAST TABLE

PDP-42MXE10/YVXK5 and PDP-42MXE20/TYVXK5 are constructed the same except for the following:

Ref. No.	Mark	Symbol and Description	Part No.		Remarks
			PDP-42MXE10 /YVXK5	PDP-42MXE20 /TYVXK5	
		<b>PCB ASSEMBLIES</b>			
17- 1	NSP	1..MAIN ASSY	AWV2286	AWV2425	
17- 2		2..MAIN ASSY	AWW1112	AWW1235	
		2..VSIF ASSY	AWW1113	AWW1245	
	NSP	1..SUB ASSY	AWV2287	AWV2427	
19- 1		2..SENB ASSY	AWW1102	AWW1217	
15- 4		2..SENC ASSY	AWW1103	AWW1218	
19- 3		2..SEND ASSY	AWW1104	AWW1219	
15- 1		2..AUDIO ASSY	AWW1105	AWW1237	
15- 2		2..COMMSLOT ASSY	AWW1106	AWW1221	
15- 3		2..COMMSLOT IF ASSY	AWW1107	AWW1222	Same Schematic diagram
13- 1		2..KEY ASSY	AWW1108	AWW1223	Same Schematic diagram
13- 2		2..LED2 ASSY	AWW1109	AWW1224	Same Schematic diagram
21- 4		42 Y DRIVE ASSY	AWV2251	AWV2334	
23- 5		MD DIGITAL ASSY	AWV2254	AWV2343	
		<b>PACKING SECTION</b>			
11-15		Operating Instructions (English/French/German /Italian/ Dutch/ Spanish/ Chinese)	ARE1419	ARE1466	
11-17		Operating Instructions (7L)(CD-ROM)	ARU1001	ARU1002	
11-18		Caution Sheet	ARM1279	ARM1220	
11- 6		Speed Clamp	AEC2051	AEC1908	
11-35		Upper Carton	AHD3461	AHD3565	
11-37		Plasma Caution Sheet	ARM1147	Not used	
11-38		Image Caution Sheet	ARM1220	Not used	
11-39		Image Stick Caution Sheet	ARM1299	Not used	
		<b>FRONT and REAR SECTION</b>			
13- 6	NSP	Name Label	AAL2746	AAL2913	
11-13		Front Case Assy	AMB2885	AMB2980	
11-14		Filter	AMR3510	AMR3662	
11-16		Pioneer Badge	AAM1101	AAM1112	
11-17		Control Cover	AMR3512	AMR3622	

Ref. No.	Mark	Symbol and Description	Rart No.		Remarks
			PDP-42MXE10 /YVXK5	PDP-42MXE20 /TYVXK5	
A	19- 8	<b>FRAME SECTION</b> Front Chassis U Assy	ANA1907	ANA2067	Pasting Location
	19- 9	Front Chassis R Assy	ANA1918	ANA2084	
	19-10	Front Chassis LA Assy	ANA1926	ANA2085	
	19-25	Gasket (0.5 x 5 x 30)	ANK1823	ANK1913	
		<b>CHASSIS SECTION</b>			
B	23- 8	Flexible Cable (J110)	ADD1330	ADD1378	
	23- 9	Flexible Cable (J117)	ADD1331	ADD1379	
	23-10	Flexible Cable (J119)	ADD1332	ADD1380	
	23-11	Flexible Cable (J120)	ADD1333	ADD1381	
	23-12	Flexible Cable (J211)	ADD1334	ADD1382	
C	23-16	PCB Spacer Gasket AUDIO	AEC1941 Not used	AEC2087 ANK1905	No. 9
		<b>PDP SERVICE ASSY SECTION</b>			
	23- 1	PDP Service Assy 42H6D1	AWU1160	AWU1181	
		<b>FRONT FRAME SECTION</b>			
		Gasket (T1.5 x 5 x L30)	Not used	ANK1913	
		Gasket (T7 x 10 x 220)	Not used	ANK1923	No. 2
		Gasket (T7 x 10 x 130)	Not used	ANK1924	No. 3
		Gasket (T7 x 10 x 50)	Not used	ANK1925	No. 4
		Conductive Tape A (W20 x 490)	Not used	ANK1934	No. 5
		Conductive Tape B (W20 x 260)	Not used	ANK1935	No. 6
		Conductive Tape C (W20 x 60)	Not used	ANK1936	No. 7
		Gasket (T0.5 x 7 x 970)	Not used	ANK1922	No. 8

Notes : • The numbers in the remarks column correspond to the numbers on the “EXPLODED and FRONT FRAME SECTION”.

- For PCB ASSEMBLIES, Refer to “1.2 CONTRAST OF PCB ASSEMBLIES”, “7. SCHEMATIC DIAGRAM” and “8. PCB CONNECTION DIAGRAM”.

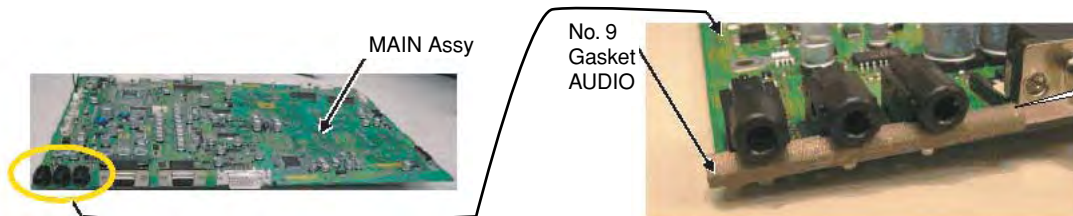
## • EXPLODED VIEWS

### PDP SERVICE ASSY

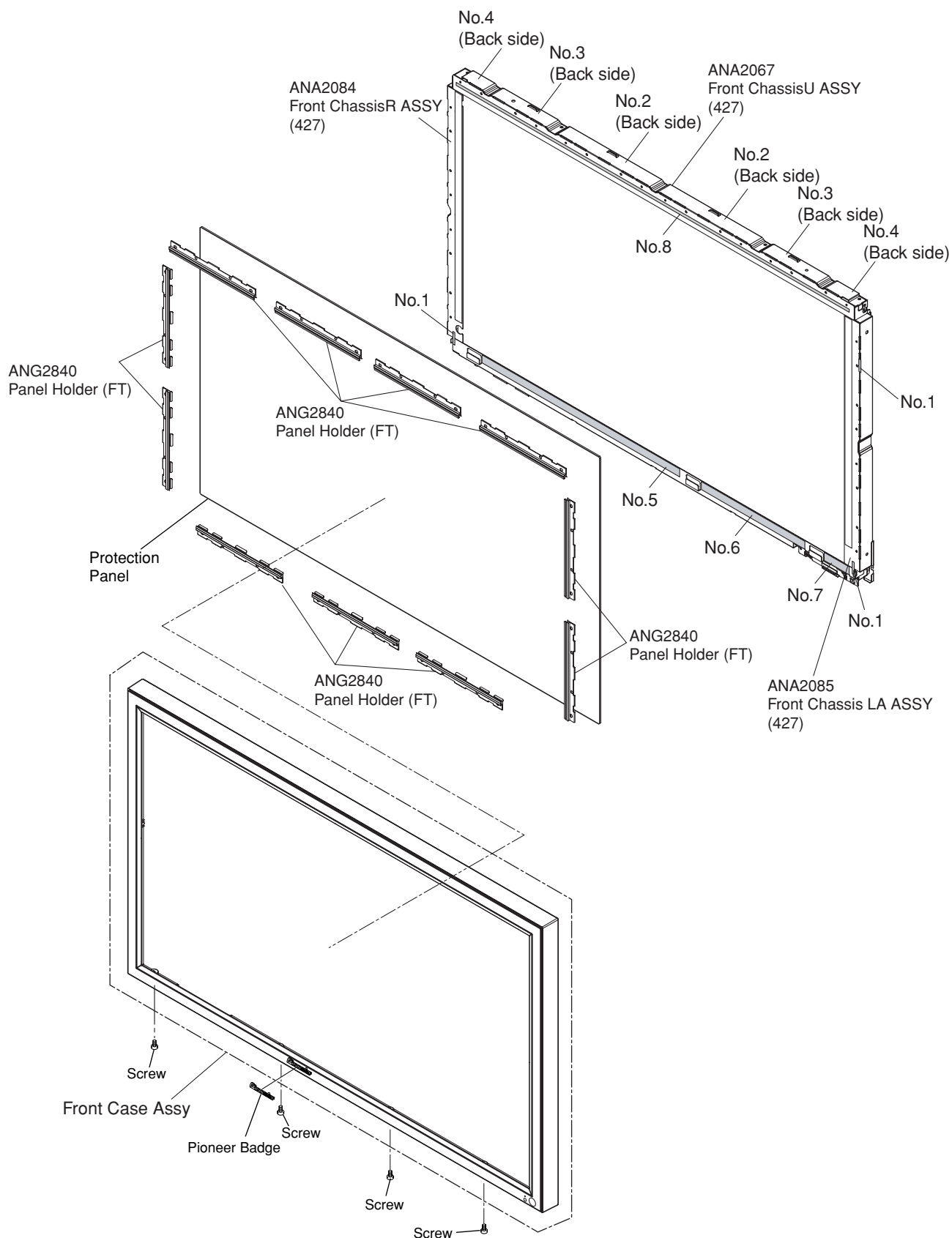
AWU1181 and AWU1160 are constructed the same except for the following:

Mark	Symbol and Description	AWU1160	AWU1181	Remarks
NSP	Panel Chassis (FT) Assy	AWU1136	AWU1168	

### CHASSIS SECTION



# FRONT FRAME SECTION



## 1.2 CONTRAST OF PCB ASSEMBLIES

### • CONTRAST OF PCB ASSEMBLIES 42Y DRIVER ASSY

AWV2334 and AWV2251 are constructed the same except for the following:

Mark	Symbol and Description	AWV2251	AWV2334	Remarks
	CN 2001 (40P CONNECTOR) R 2197	AKM1217 NRS1/16S0R0J	AKM1348 Not used	

### MD DIGITAL ASSY

AWV2343 and AWV2254 are constructed the same except for the following:

Mark	Symbol and Description	AWV2254	AWV2343	Remarks
	CN 3501 (40P CONNECTOR) CN 3502 (40P CONNECTOR) CN 3503 (40P CONNECTOR) CN 3504 (40P CONNECTOR) CN 3506 (40P CONNECTOR)	AKM1217 AKM1217 AKM1217 AKM1217 AKM1217	AKM1348 AKM1348 AKM1348 AKM1348 AKM1348	

## PCB PARTS LIST FOR PDP-42MXE20 UNLESS OTHER WISE NOTED

Mark No.	Description	Part No.	Mark No.	Description	Part No.
<b>MAIN ASSY (AWW1235)</b>			<b>CAPACITORS</b>		
<b>[CPU BLOCK]</b>			C9501,9503,9504,9511		CKSRYB104K25
<b>SEMICONDUCTORS</b>			C9502		CEHVKW470M16
IC9501 MICOM	M30700FKNGP		C9505		CKSRYB334K10
△IC9502	PQ1U501M2ZPH		C9508		ACG1134
△IC9503	NJM2846DL3-33		C9509		CKSRYB103K50
IC9504	SN74LVC08APW				
IC9505	BD4727G		C9510,9525,9547		CCSRCH102J50
IC9506	MC74VHCT132ADT		C9512		CKSQYB105K16
IC9507	RTC-4543SA-B-7		C9514		CKSRYB104K50
IC9508	24LC128(I)SN		C9517		ACH1431
IC9509	TC74VHCT08AFTS1		C9518,9522,9528-9530		CKSRYB104K25
Q9503	2SA1576A		C9520,9521		CCSRCH470J50
D9501,9502,9504,9506	1SS301		C9523		CCSRCH391J50
D9507	RB751S-40		C9524		CKSRYB223K50
D9508	MZ2J73200L		C9531,9532		CCSRCH100D50
D9514	RD3R3S(B1)		C9533-9536,9541-9546		CKSRYB104K25
<b>MISCELLANEOUS</b>			C9537		CCSRCH561J50
F9501-9503	DTL1034		C9538		CEHVKW470M6R3
△X9501 CRYSTAL RESONATOR	ASS1201		C9540		CCSRCH181J50
CN9501 CONNECTOR 4P	AKM1275		<b>[INTERFACE BLOCK]</b>		
CN9503 SOCKET	AKP1286		<b>SEMICONDUCTORS</b>		
△BT9501 LITHIUM BATTERY	AEX1030		IC5001		SN74LV14APW
<b>RESISTORS</b>			IC5002		SN74LVC14APW
R9563,9585,9637,9638	RS1/10SR3602F		IC5003		BR24C21FJ
R9630,9687	RS1/8SQ470J		IC5004		BA7657F
R9636	RS1/10SR2202F		IC5005		TC74LCX157FTS1
R9640-9642,9644	RS1/10SR3602F		△IC5006		NJM2846DL3-05
R9665	RS1/10SR1501F		IC5007		EL5362IUZ-T7
R9685	RS1/8SQ220J		IC5008		SN74LVC2G126DCTR
R9686	RS1/8SQ0R0J		△IC5009		BA05FP
R9688	RS1/10SR2002F		Q5001-5003,5016,5017		2SC4081
R9692,9693	RAB4CQ103J		Q5018		DTC144EUA
Other Resistors	RS1/10SR###J		D5001-5007,5018,5019		UDZS5R6(B)
			D5010,5017,5020,5024		1SS301



Mark No.	Description
D5011-5013,5021-5023	
<b><u>MISCELLANEOUS</u></b>	
L5001,5002,5004,5005	
L5003	
F5001,5002,5025	
F5003-5007,5010-5012	
F5014-5018,5031-5035	
CN5001 20P CONNECTOR	
CN5002,5003 15P D-SUB SOCKET	
<b><u>RESISTORS</u></b>	
R5004-5006	
R5058,5059,5062,5063	
R5061,5065,5071	
R5067,5068	
R5072,5073,5077,5078	
R5074-5076	
R5082,5083	
Other Resistors	
<b><u>CAPACITORS</u></b>	
C5001,5002,5041,5051	
C5003,5004,5035,5036	
C5005,5014-5019	
C5007-5009,5034,5059	
C5010-5012	
C5013	
C5020	
C5021-5026	
C5033	
C5037,5065	
C5042,5043,5052,5057	
C5044,5046,5048	
C5050,5053,5058	
C5054	
C5056	
C5060,5062-5064	
C5061	

**[INTERFACE-B BLOCK]**

## SEMICONDUCTORS

IC5301	BU2152FS
⚠ IC5303	NJM78M09DL1A
IC5304	MAX7313AEG
IC5305	SN74LVC2G126DCTR
IC5306	NJM4580V
IC5307	TC74VHC541FTS1
IC5308	NJM2750M
Q5371,5372	2SC4081
Q5373	2SA1576A
D5307	1SS301
D5375	RB160M-40
D5376	1SS302

## MISCELLANEOUS

L5371	BTH1102
F5301-5303,5371,5372	DTL1041
F5311,5312	DTL1034
JA5371-5373 JACK	AKN1075

Mark No.	Description
CN5301	50P CONNECTOR PBF
<b><u>RESISTORS</u></b>	
R5303	
R5376,5377	
R5394-5397	
Other Resistors	
<b><u>CAPACITORS</u></b>	
C5301-5304,5360,5361	
C5305	
C5359,5400	
C5362	
C5363,5391,5401	
C5371-5374	
C5375,5376	
C5377-5380	
C5381-5384,5398,5399	
C5385-5388	
C5389,5390,5402,5403	
C5393	
C5395	
C5396,5397	
<b>[RGB H/V SELECT A BLOCK]</b>	
<b><u>SEMICONDUCTORS</u></b>	
IC5601	
IC5602	
IC5603	
IC5604	
IC5605	
IC5606	
Q5601,5603,5604	
Q5602,5606	
Q5607	
<b><u>MISCELLANEOUS</u></b>	
L5601,5604,5605	
L5602,5603,5606,5607	

## RESISTORS

R5672	RS1/10SR2700F
R5673	RS1/10SR3000F
Other Resistors	RS1/10SR####J

## CAPACITORS

C5616-5618,5636,5638	CKSQYB105K16
C5619-5623,5626-5628	CKSRYB104K25
C5624,5631,5649-5651	CEHVKW470M16
C5625,5629	CKSQYB225K16
C5630,5632,5634,5644	CKSRYB104K25
C5635,5637,5642	CKSRYF474Z25
C5640	CKSRYB392K50
C5643,5676	ACG1134
C5645	CCSRCH101J50
C5646-5648 (47 uF /6.3 V)	ACH1444
C5652-5657,5681	CKSRYB103K50
C5658-5663	CCSRCH4ROC50
C5670	CCSRCH471J50
C5671,5679,5680	CKSRYB104K25
C5672	ACH1430

**Mark No. Description**C5677  
C5678**Part No.**CCSRCH561J50  
CEHVKW470M16**Mark No. Description**C6301-6313,6315,6316  
C6320  
C6321-6337  
C6338,6340,6343**Part No.**CKSRYB104K25  
CEHVKW470M6R3  
CKSRYB103K50  
CKSRYB104K25**[RGB H/V SELECT B BLOCK]****SEMICONDUCTORS**IC5901  
IC5902  
IC5903  
IC5904  
IC5905BA7657F  
TC74VHC153FT  
BA7078BF  
TC74LCX157FTS1  
SM5301CSQ5901,5903  
Q5902,5904,5905  
D5901-59032SA1576A  
2SC4081  
1SS302**MISCELLANEOUS**L5901-5903  
L5904,5905,5907BTH1102  
BTH1104**RESISTORS**R5930  
R5931  
Other ResistorsRS1/10SR2700F  
RS1/10SR3000F  
RS1/10SR###J**CAPACITORS**C5901-5903 (47 uF /6.3 V)  
C5904-5906,5910-5912  
C5907-5909,5939,5941  
C5913-5918  
C5925,5942ACH1444  
CKSRYB103K50  
CEHVKW470M16  
CCSRCH4R0C50  
CKSQYB225K16C5926,5928,5929,5940  
C5927  
C5930 (100 uF/ 16 V)  
C5934,5945  
C5935-5937,5956,5958CKSRYB104K25  
CCSRCH471J50  
ACH1430  
ACG1134  
CKSQYB105K16C5938  
C5946-5949,5954,5962  
C5952  
C5955,5957,5960  
C5961CCSRCH561J50  
CKSRYB104K25  
CKSRYB392K50  
CKSRYF474Z25  
CCSRCH101J50C5964,5966-5968  
C5970CKSRYB104K25  
CEHVKW470M16**[VIDEO SLOT OE BLOCK]****SEMICONDUCTORS**IC6301  
IC6302,6304PD6435A  
IDT2305A**MISCELLANEOUS**F6301,6302,6304  
⚠ X6301 CERAMIC RESONATOR  
CN6301,6302 50P CONNECTOR PBF  
⚠ FU6301 PROTECTOR(4.5A)BTX1041  
ASS1169  
AKM1353  
AEK1082**RESISTORS**R6301-6312  
R6313-6324  
R6334-6345  
R6356,6364  
Other ResistorsRAB4CQ103J  
RAB4CQ220J  
RAB4CQ470J  
RAB4CQ102J  
RS1/10SR###J**CAPACITORS****[A/D A BLOCK]****SEMICONDUCTORS**IC6501  
⚠ IC6502  
IC6503  
Q6501-6503  
D6501TDA8754HL/14/C1  
NJM2846DL3-33  
SN74LVC1G125DCK  
2SA1576A  
1SS301**MISCELLANEOUS**L6501  
L6502  
F6501-6505ATH1127  
ATL1148  
BTX1041**RESISTORS**R6501-6503  
R6510,6513,6516  
R6512,6515,6518  
Other ResistorsRS1/8SQ0R0J  
RS1/10SR4300F  
RS1/10SR18R0F  
RS1/10SR###J**CAPACITORS**C6501,6503  
C6502,6506,6508,6510  
C6504  
C6505,6507,6509,6517  
C6511 (100 uF/ 16 V)CEHVKW221M10  
CKSRYB104K25  
CKSQYB225K16  
CKSQYB105K16  
ACH1430C6512-6514,6520,6522  
C6515  
C6516  
C6518,6523,6524,6529  
C6519,6521CKSRYB104K25  
CKSRYB224K16  
CCSRCH681J50  
CKSQYB105K16  
CCSRCH331J50C6525,6526,6528,6531  
C6527,6532,6537  
C6530,6534,6535  
C6533,6536,6538-6550  
C6552,6553CKSRYB104K25  
CKSRYB472K50  
CKSQYB105K16  
CKSRYB104K25  
CKSRYB104K25**[A/D B BLOCK]****SEMICONDUCTORS**IC6701  
⚠ IC6702  
IC6703  
Q6701-6703  
D6701TDA8754HL/14/C1  
NJM2846DL3-33  
SN74LVC1G125DCK  
2SA1576A  
1SS301**MISCELLANEOUS**L6701  
L6702  
F6701-6705ATH1127  
ATL1148  
BTX1041**RESISTORS**R6701-6703  
R6710,6713,6716  
R6712,6715,6718  
Other ResistorsRS1/8SQ0R0J  
RS1/10SR4300F  
RS1/10SR18R0F  
RS1/10SR###J**CAPACITORS**C6701,6706,6708,6710  
C6702,6703CKSRYB104K25  
CEHVKW221M10

PDP-42MXE20

**Mark No. Description****Part No.****Mark No. Description****Part No.****CAPACITORS**

A

C8501  
C8502-8504,8508,8510  
C8505  
C8506,8507

ACH1430  
CKSRYB104K25  
CKSRYB105K10  
CKSRYB103K50

Q4005  
D4020,4021  
D4022

DTC144EUA  
UDZS5R6(B)  
1SS302

**MISCELLANEOUS**

F4001  
KN4001,4002 GROUND PLATE  
CN4001 CONNECTOR 13P  
CN4002-4004 50P CONNECTOR PBF  
CN4005 20P CONNECTOR

OTL1046  
VNF1109  
AKM1299  
AKM1353  
AKM1343

CN4006 PCI SOKET184

AKP1251

**RESISTORS**

R4002  
R4004  
R4005,4010,4015  
R4007,4012,4017  
R4008,4013,4018

RS1/10SR2201F  
RS1/10SR1001F  
RS1/10SR1002F  
RS1/10SR1502F  
RS1/10SR1202F

R4009,4014  
R4022,4024  
R4040,4041,4047-4050  
R4045  
R4046  
Other Resistors

RS1/10SR3302F  
RS1/10SR4701F  
RS1/8SQ0R0J  
RS1/10SR8201F  
RS1/10SR2001F  
RS1/10SR###J

**CAPACITORS**

C4001  
C4002-4007,4020,4022  
C4023  
C4024  
C4025

ACG1134  
CKSRYB104K25  
CCSRCH181J50  
CCSRCH151J50  
CCSRCH101J50

C4026,4027  
C4028  
C4029  
C4030,4035  
C4033,4034

CCSRCH271J50  
CKSRYB103K50  
CEHVKW330M25  
CKSRYB104K25  
CKSQYB474K25

**SENB ASSY (AWW1217)****SEMICONDUCTORS**

△IC1001

LM75BIMX-3

**MISCELLANEOUS**

F1001,1003  
CN1001 CONNECTOR 8P

OTL1046  
AKM1279

**RESISTORS**

R1003  
Other Resistors

RS1/8SQ0R0J  
RS1/10SR###J

**CAPACITORS**

C1002  
C1003  
C1005

CKSRYB104K25  
CCSRCH151J50  
CCSRCH181J50

**SENC ASSY (AWW1218)****SEMICONDUCTORS**

△IC1101

LM75BIMX-3

**MISCELLANEOUS**

F1101-1103

OTL1046

**[FAN CONTROL ETC. BLOCK]****SEMICONDUCTORS**

△IC9001  
IC9002  
Q9001,9002,9007  
Q9003,9004  
Q9008

PQ20WZ11  
PQ200WNA1ZPH  
2SC4081  
2SA1576A  
DTC144EUA

B

D9001,9003,9005  
D9006

1SS301  
1SS302

**MISCELLANEOUS**

F9002,9003,9010,9011  
KN9001-9004 GROUND PLATE  
CN9001 CONNECTOR 9P  
CN9003,9004,9011 CONNECTOR 3P  
CN9006,9012 CONNECTOR 7P

BTX1041  
VNF1109  
AKM1280  
AKM1274  
AKM1278

C

CN9007 CONNECTOR 6P  
CN9008 CONNECTOR 8P  
CN9010 40P TOP CONNECTOR  
△FU9001,9003 PROTECTOR (4.5 A)  
△FU9002 PROTECTOR (6.3 A)

AKM1277  
AKM1279  
AKM1342  
AEK1082  
AEK1084

**RESISTORS**

R9018,9109  
R9019  
R9020  
R9021  
R9027,9028

RS1/10SR2001F  
RS1/10SR5601F  
RS1/10SR1502F  
RS1/10SR6801F  
RS1/8SQ221J

D

R9032,9043-9054  
R9033  
R9037,9038  
R9069-9080,9082-9084  
R9090-9101

RS1/8SQ0R0J  
RS1/8SQ470J  
RS1/8SQ102J  
RS1/8SQ0R0J  
RS1/8SQ0R0J

E

R9107  
R9108  
Other Resistors

RS1/10SR3301F  
RS1/10SR2702F  
RS1/10SR###J

**CAPACITORS**

C9001  
C9002  
C9003  
C9007  
C9008

CKSRYF104Z50  
CEHVKW470M16  
ACH1431  
CKSRYB103K50  
CKSQYB105K16

E

C9009  
C9010

CEHVKW330M25  
CKSRYB104K25

**VSIF ASSY (AWW1245)****SEMICONDUCTORS**

IC4001  
△IC4002  
IC4003  
Q4001-4003  
Q4004

24LC01B  
LM75BIMX-3  
PQ200WNA1ZPH  
HN1A01FU  
2SC4081

F

5	6	7	8
Mark No. Description	Part No.	Mark No. Description	Part No.
CN1101 CONNECTOR 4P	AKM1275	C3001,3057	ACH1430
<b>RESISTORS</b>		C3002,3015,3030,3031	CKSQYB105K16
All Resistors	RS1/10SR###J	C3008	CKSRYB153K50
<b>CAPACITORS</b>		C3016,3019,3026,3029	CCSRCH561J50
C1102	CKSRYB104K25	C3017,3018,3027,3028	CCSRCH560J50
C1103	CCSRCH391J50	C3020,3025	CCSRCH680J50
C1105	CCSRCH271J50	C3021	CKSRYB224K16
		C3022	CEHVKW100M16
		C3023	CEHVKW470M16
		C3024,3032,3034,3038	CKSRYB104K25
<b>SEND ASSY (AWW1219)</b>		C3033,3039,3054	ACH1464
<b>SEMICONDUCTORS</b>		C3036,3037,3042	CKSQYB105K16
⚠ IC1201	LM75BIMX-3	C3040,3055,3056,3063	CKSRYB104K25
<b>MISCELLANEOUS</b>		C3043,3044,3048,3049	CFTLA474J50
F1201,1203	OTL1046	C3045,3046,3051,3052	ACG1130
CN1201 CONNECTOR 8P	AKM1279	⚠ C3066-3069	CFTLA104J50
<b>RESISTORS</b>		C3070	CCSRCH102J50
R1203	RS1/8SQ0R0J	C3071	CKSRYB104K25
Other Resistors	RS1/10SR###J	C3072	CEHVKW220M16
<b>CAPACITORS</b>		C3074,3075	ACG1132
C1202	CKSRYB104K25	C3076,3077	ACG1133
C1203	CCSRCH391J50	C3078	ACH1463
C1205	CCSRCH181J50	C3082	CKSRYB103K50
		C3083,3084	CKSRYB104K50
<b>AUDIO ASSY (AWW1237)</b>			
<b>SEMICONDUCTORS</b>		<b>COMMSLOT ASSY (AWW1221)</b>	
IC3001	R2S15900	<b>SEMICONDUCTORS</b>	
⚠ IC3002	M61571AFP	IC2001,2002	MC74VHCT132ADT
⚠ IC3004	NJM78M09DL1A	IC2003	MAX3222IPER
Q3003,3005,3006,3008	2SA1576A	IC2004,2005	TC74VHC00FT
Q3004,3009	2SC4081	IC2006,2007	TC74VHC125FT
Q3007	DTC143ZUA	D2001-2010,2022,2023	UDZS16(B)
D3001	DAN217U	D2011-2014	DAN217U
⚠ D3003-3006	RB160M-40	D2021	UDZS3R6(B)
D3007	RD10S(B3)	<b>MISCELLANEOUS</b>	
<b>MISCELLANEOUS</b>		JA2002,2003 6PIN MINI-DIN JACK	AKP1254
L3001-3004	ATH1189	CN2001 9P D-SUB SOCKET	AKP1213
L3005,3006	BTH1102	2001	VNE1949
F3001-3003	OTL1046	<b>RESISTORS</b>	
F3006-3009	BTX1041	R2019,2020	RS1/8SQ0R0J
KN3001-3003 EARTH METAL FITTING	VNF1109	Other Resistors	RS1/10SR###J
⚠ CN3001 SPEAKER TERMINAL 4-P	AKE1062	<b>CAPACITORS</b>	
CN3003 CONNECTOR 6P	AKM1277	C2001-2007	CCSRCH101J50
CN3004 CONNECTOR 9P	AKM1280	C2008,2011-2013,2016	CKSRYB104K50
<b>RESISTORS</b>		C2009,2010	CKSRYB104K25
R3005,3006	RS1/8SQ221J	C2014,2015,2019-2021	CCSRCH471J50
R3014,3019	RS1/10SR3902F	C2017,2022-2024	CKSRYB104K50
R3015,3018	RS1/10SR1502F	C2018	CEHVKW470M16
R3023	ACN1243		
R3024, 3067	ACN1244		
R3035-3038	RS1/16S563J	<b>COMMSLOT IF ASSY (AWW1222)</b>	
R3054,3056,3059,3060	RS1/8SQ103J	<b>SEMICONDUCTORS</b>	
R3061-3066	RS1/8SQ0R0J	IC2301	TC74VHC00FT
Other Resistors	RS1/10SR###J	Q2301,2351	2SC4081
<b>CAPACITORS</b>		Q2302	DTC144EUA
		Q2350	HN1A01FU

Mark No.	Description	Part No.
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**MISCELLANEOUS**

CN2302	40P SIDE CONNECTOR	AKM1347
CN2303	EDGE CARD CONN 46P	AKP1252
CN2301	L PLUG (8P)	KM200NA8L

**RESISTORS**

R2313	RS1/8SQ0R0J
R2350	RS1/10SR1502F
R2351,2353	RS1/10SR1202F
R2354	RS1/10SR1002F
R2355	RS1/10SR2201F

Other Resistors	RS1/10SR###J
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**CAPACITORS**

C2301	CKSRYB104K50
C2350,2351	CKSRYB104K25

**KEY ASSY (AWW1223)****SEMICONDUCTORS**

IC2201	PD5719A
Q2201	2SC4081
D2201	1SS355

**MISCELLANEOUS**

S2201-2208	VSG1020
⚠ X2201 CERALOCK (3.84MHz)	ASS1162
CN2201 3PIN CONNECTOR	S3B-EH

**RESISTORS**

R2204,2207	RS1/10SR2202F
R2210	RAB4CQ182J
Other Resistors	RS1/10SR###J

**CAPACITORS**

C2201,2202,2205	CKSRYB472K50
C2203,2204,2208	CCSRCH101J50
C2206	CKSRYB104K50
C2207	CEHVKW470M6R3

**LED2 ASSY (AWW1224)****SEMICONDUCTORS**

Q2401	HN1B04FU
Q2403-2405	2SC4081
Q2406	2SA1576A
D2401	S9561
D2402	SPR-39MVWF

**MISCELLANEOUS**

CN2401 CONNECTOR 8P	AKM1294
U2401 REMOTE RECEIVER UNIT	RPM6940-V4
2401 LED SPACER	AEB1477

**RESISTORS**

R2416-2419	RS1/8SQ130J
All Resistors	RS1/10SR###J

**CAPACITORS**

C2401,2405,2409	CKSRYB104K25
C2402-2404	CKSRYF105Z16
C2407,2408	CEHVKW470M16

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PDP-42MXE20



## 4

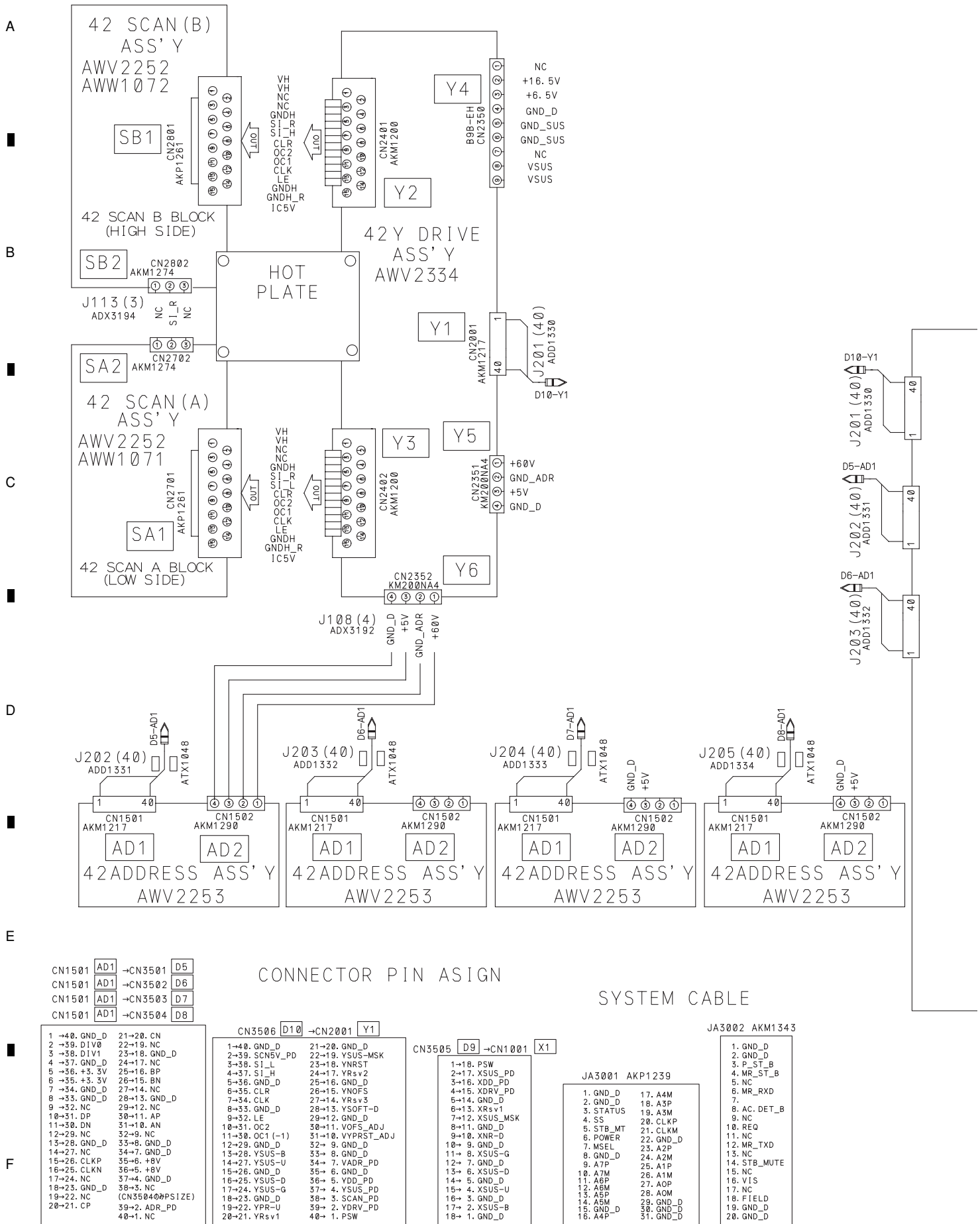
## A

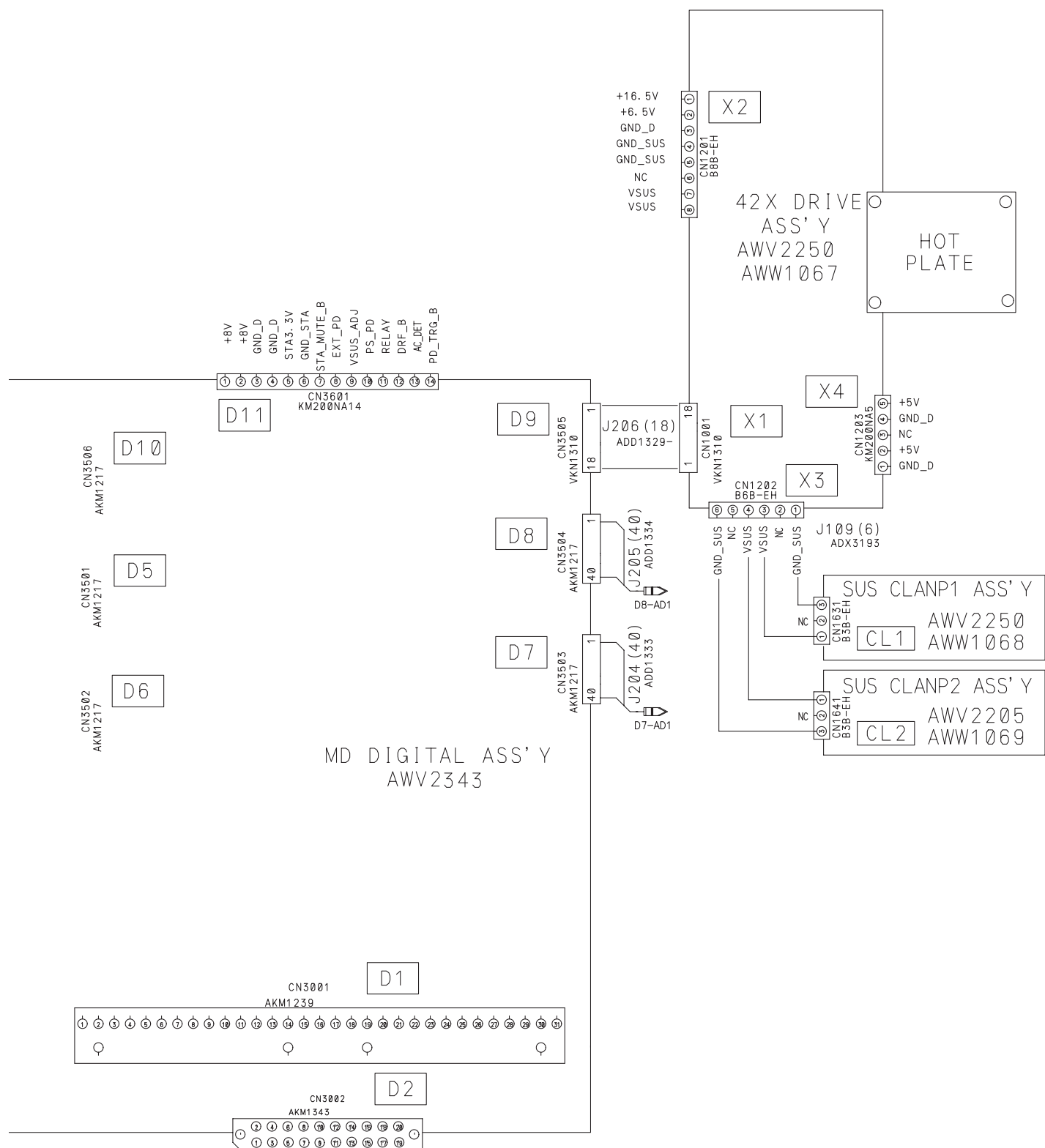






## 2.2 OVERALL CONNECTION DIAGRAM (2/2)





■1■2■3■4■

# 3. DIAGNOSIS INFORMATION

## 3.1 THE FLOW OF DIAGNOSIS

- A
- Refer to the "7.1.3 TROUBLESHOOTING" on ARP3340 (PDP-425CMX : Page 128).

■

B

■

C

■

D

■

E

■

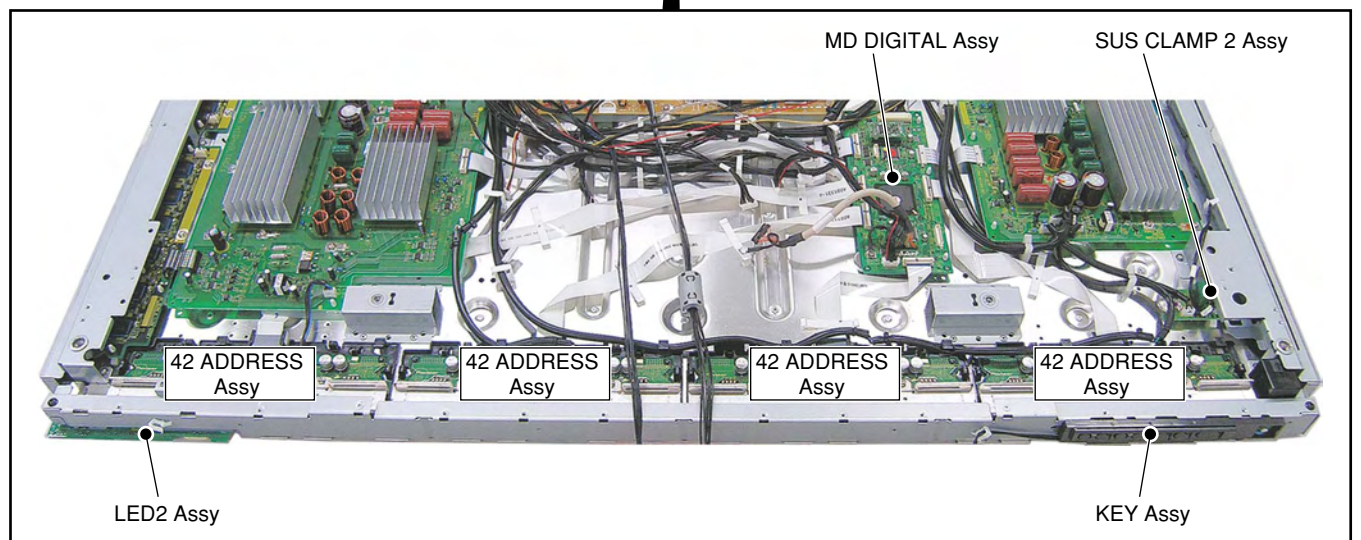
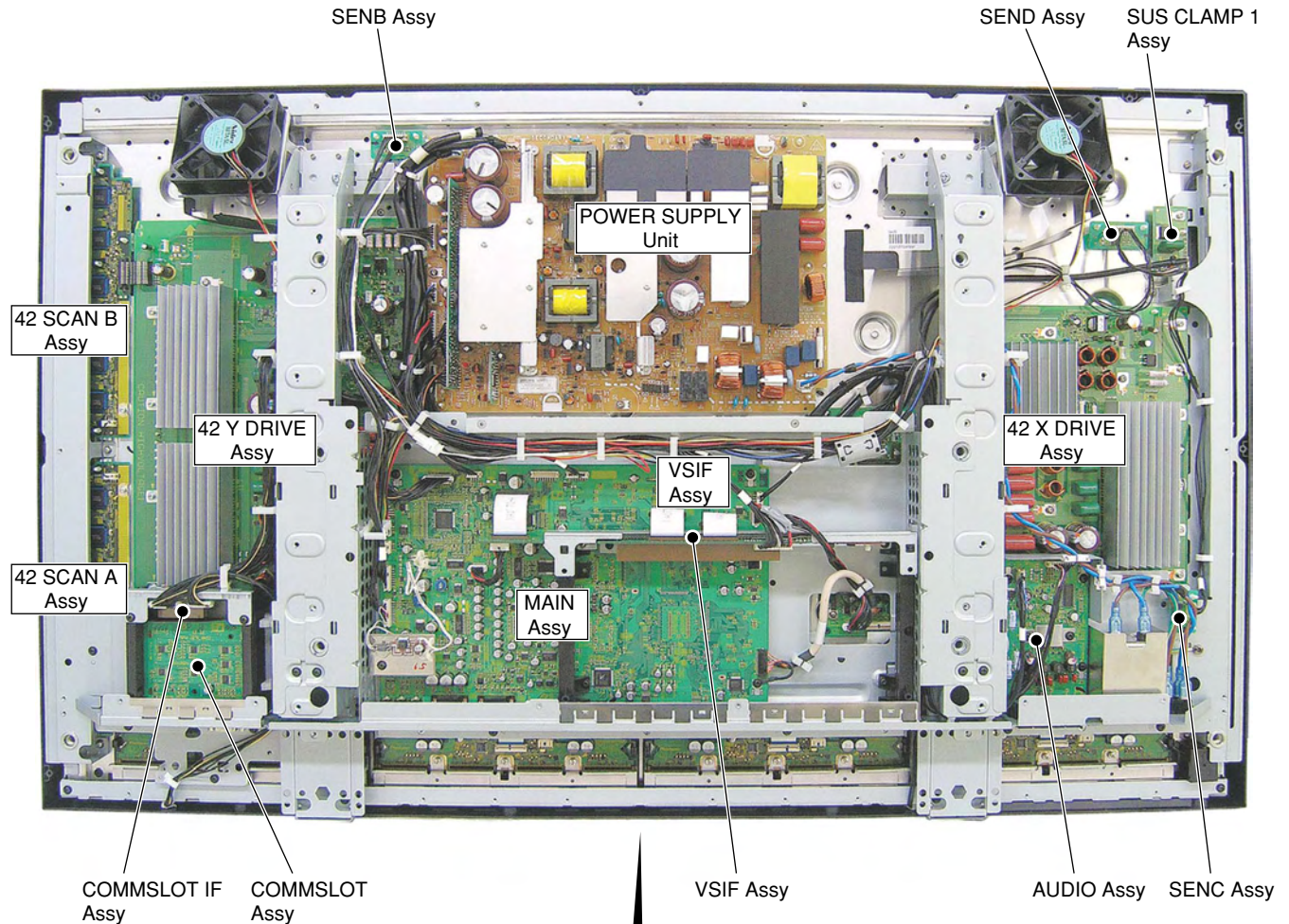
F

## 4. GENERAL INFORMATION

### 4.1 DIAGNOSIS

#### 4.1.1 PCB LOCATION

**NOTE :** When disassembly, old component possesses it with MAIN ASSY and VSIF ASSY it then new component and old component confirm it when change it.





## 5. ADJUSTMENT



1. At shipment, the unit is adjusted to its best conditions. Normally, it is not necessary to readjust even if an assembly is replaced. If the adjustment is shifted or if it becomes necessary to readjust because of part replacement, etc., perform the adjustment as described below.
2. Any value changed in Service/Factory mode will be stored in memory as soon as it is changed. Before readjustment, take note of the original values for reference in case you need to restore the original settings.
3. Use a stable AC power supply.

### 5.1 ADJUSTMENT REQUIRED WHEN THE SET IS REPAIRED OR REPLACED

#### ■ When any of the following assemblies is replaced

POWER SUPPLY Unit

No adjustment required

MD DIGITAL Assy

Refer to the "7.1.5 BACKUP WHEN THE MAIN UNIT IS ADJUSTED" on ARP3340 (PDP-425CMX).

42 X DRIVE Assy

No adjustment required

42 Y DRIVE Assy

No adjustment required

Service Panel

Refer to the "6.7 METHOD FOR REPLACING THE SERVICE PANEL ASSY" on ARP3340 (PDP-425CMX).

MAIN Assy

Refer to the "ADJUSTMENT"

SUB Assy (Audio, 232C, Sensor, etc.)

No adjustment required

Other assemblies

No adjustment required

#### ■ When any part in the following assemblies is replaced

POWER SUPPLY Unit

The assembly must be replaced as a unit, and no part replacement is allowed.

MD DIGITAL Assy

No adjustment required

42 X DRIVE Assy (IC1101, IC1102)

No adjustment required

42 Y DRIVE Assy (IC2201, IC2202)

No adjustment required

MAIN Assy

The assembly must be replaced as a unit, and no part replacement is allowed except the part of note 1.

SUB Assy (Audio, 232C, Sensor, etc.)

The assembly must be replaced as a unit, and no part replacement is allowed except the part of note 2.

Other assemblies

The assembly must be replaced as a unit, and no part replacement is allowed.

Note 1: MAIN Assy

IC500, IC5002, IC5004, IC5005, IC5007, IC5008, IC5301, IC5304, IC5305, IC5307,  
IC5603–IC5606, IC5902, IC5903, IC5904, IC9504, IC6301, IC6302, IC6304,  
IC8002, IC8003, IC8501, X8001, X8002, X9501

Note 2: SUB Assy

IC3001, IC3002, IC3004,  
IC2301, U2401, Q2301, Q2302

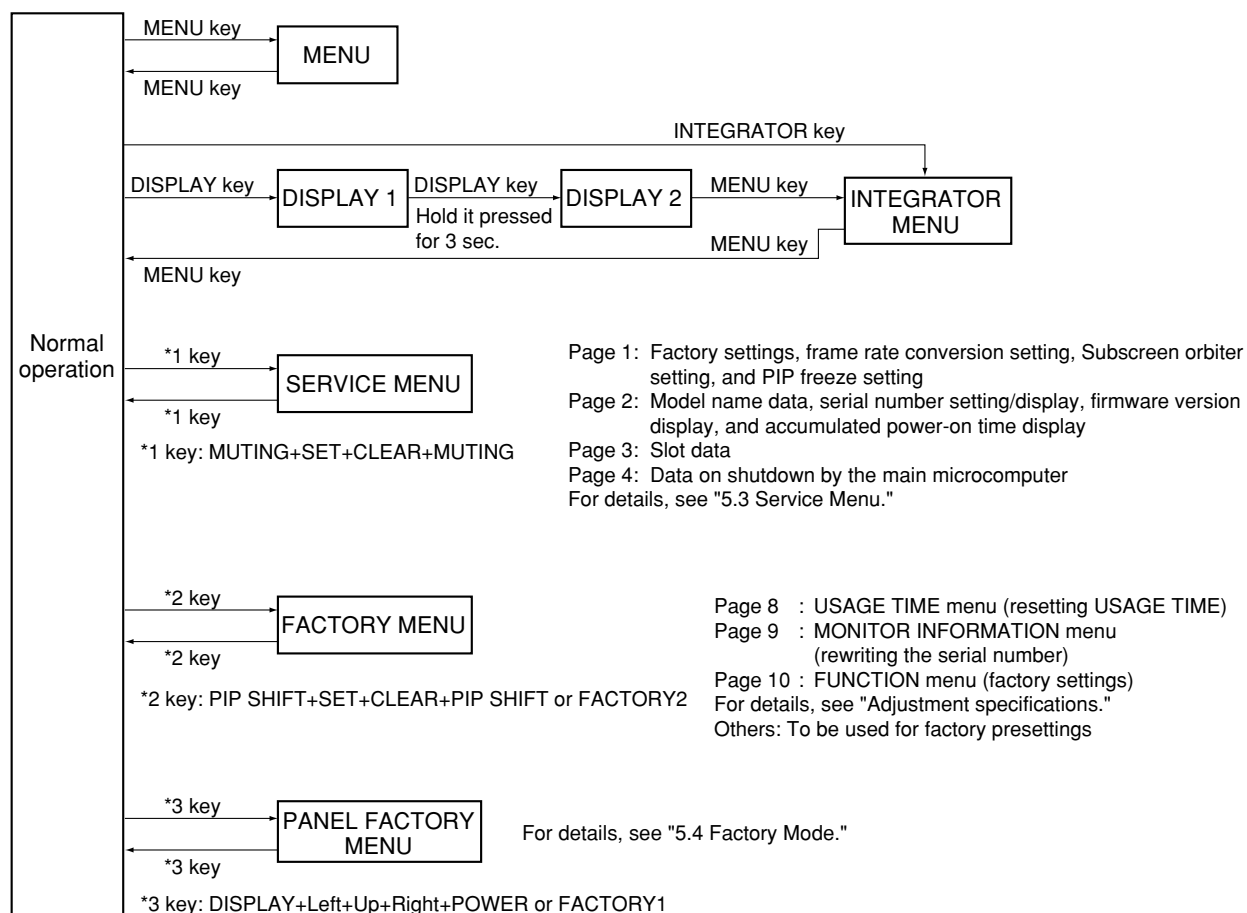
## 5.2 SERVICE MENU LIST

Three Service Factory modes are provided with this unit:

**Service menu:** Mainly used for servicing. Display of shutdown data for the MAIN Assy, serial number, or accumulated power-on time is performed. When the MAIN Assy is replaced, input the serial number, using this menu.

**Factory menu:** Mainly used for factory presetting. The mode for line adjustment is displayed. Not for normal use. When the MAIN Assy is replaced, factory shipment setting (P69) is required. For details, see "Adjustment after the replacement of MAIN Assy" (6.2 ADJUSTMENT).

**Panel Factory menu:** Mainly used for servicing. Display of power-down data inside the module and of accumulated power-on time, MASK ON/OFF, and setting of the Vofs voltage can be performed. When either the MD DIGITAL Assy, Service panel, or power supply unit is replaced, setting is required, using this menu. For details, see "6.7 METHOD FOR REPLACING THE SERVICE PANEL ASSY", "7.1.5 BACKUP WHEN THE MAIN UNIT IS ADJUSTED" on ARP3340 (PDP-425CMX).



## 5.3 SERVICE MENU

### Service menu

A screen shifts to the Service Menu mode by the next key operation.  
Similarly, a screen ends the Service Menu mode by the next key operation.

MUTING + SET + CLEAR + MUTING

CLEAR : The key which moves to a next page group

ID SELECT : The key which moves to a previous page group

SERVICE MENU			
SHIP	A/J	SCR-SPEED	1
PSC LIMIT	OFF	PIC-SIZE	ON
LIMIT-VD	OFF		
LIMIT-PC	ON		
U-SCAN	OFF		
L-BOOST	OFF		
V-FREQ OT	60HZ		
V-FREQ VD	60HZ		
SYNLEVEL1	TTL		
SYNLEVEL2	TTL		
DVI-SEL	HDCP		
SUB ORB	ON		
PIC FREEZE	ON		
MENU/ENTER		NEXT	EXIT PREV 1 / 4

MONITOR INFORMATION			
MODEL NAME	: PDP-427CMX		
SERIAL/NUMBER	: ABCDEFGHIJKL		
SOFTWARE VERSION	: P053		
USAGE TIME	: 00000H		
T1 25 T2 25	T3 25 T4 --- T5 25		
MENU/ENTER		NEXT	EXIT PREV 2 / 4

MENU	Functions	Item	default setting		
SHIP (shipment mode)	Selects the place of shipment	A/J /G /CKD	A/J	G	CKD
PSC-LIMIT(PLC output limit)	Unsupport.	OFF / 1- 255	OFF	OFF	OFF
LIMIT-VD(PLC output limit for video)	Unsupport.	ON/OFF	OFF	OFF	OFF
LIMIT-PC(PLC output limit for PC)	Unsupport.	ON/OFF	ON	ON	ON
U-SCAN(Under scan )	The change function in under-scan mode and over- scan mode.	ON/OFF	OFF	OFF	OFF
L-BOOST(Luminance boost )	Unsupport.	-	-	-	-
V-FREQ OT(Vertical freq. for other )	The AUTO/60Hz change function of Vertical freq. (for other)	AUTO/60HZ	60Hz	60Hz	60Hz
	60Hz mode ->convert to 75Hz				
V-FREQ VD(Vertical freq. for video)	The AUTO/60Hz change function of Vertical freq. (for video)	AUTO/60HZ	60Hz	60Hz	60Hz
	60Hz mode ->convert to 75Hz				
SYNLEVEL 1	Unsupport.	-	-	-	-
SYNLEVEL 2	Unsupport.	-	-	-	-
DVI-SEL	This setup is for the engineer	HDCP/ORG	HDCP	HDCP	HDCP
SUB ORB(Sub picture orbiter)	Set sub picture orbiter to off.	ON/OFF	ON	ON	ON
PIC FREEZE	Picture freeze setting.	ON/OFF	ON	ON	ON
SCR-SPEED(Screen wiper speed)	Unsupport.	1-5	1	1	1
PIC-SIZE(Picture size)	Unsupport.	ON/OFF	ON	ON	ON

MODEL NAME

A/J : PDP-427CMX

G : PDP-42MXE20

CKD : PDP-42MXE20



### SLOT INFORMATION

VIDEO SLOT COMM SLOT  
 TYPE:P-5003 TYPE:P  
 3G4G:4G 4G5G:4G  
 DSUBSW:INPUT1 BAUD RATE:VARIABLE  
 D-FORM:444-2CH

MENU/ENTER NEXT EXIT PREV 3 / 4

### SD INFORMATION

MAIN-SUB TIME

1	H
2	H
3	H
4	H
5	H
6	H
7	H
8	H

MENU/ENTER NEXT EXIT PREV 4 / 4

VIDEO SLOT TYPE : P-5003 (P : made by Pioneer, PDA-5003)  
 P-5004 (P : made by Pioneer, PDA-5004)  
 P-CYBER (P : made by Pioneer, CYBER\_SLOT)  
 S-A (S : made by 3rd party, TYPE-A)  
 S-B (S : made by 3rd party, TYPE-B)  
 S-C (S : made by 3rd party, TYPE-C)

⋮

S-J (S : made by 3rd party, TYPE-J)

---(No slot connection)

+++ (Not defined)

3G4G : 3G (3rd Generation) ,4G (4th Generation)

DSUBSW : INPUT1 (LOOP OUT FROM INPUT1)

V-SLOT (LOOP OUT FROM VIDEOSLOT)

D-FORM : 422CBCRW (VIDEO correspondence double locking for 525i/625i)

422CRCBW (VIDEO correspondence double locking for 525i/625i)

422CBCRS (VIDEO correspondence single locking)

422CRCBS (VIDEO correspondence single locking)

444-1 CH (PC/ VIDEO correspondence)

444-2 CH (PC/ VIDEO correspondence)

+++ (Not defined)

COMM SLOT TYPE : P (made by Pioneer), S (made by 3rd party)

4G5G : 4G (4th Generation),5G (5th Generation)

BAUD RATE : VARIABLE (variable)

9600 F (9600bps fixed)

38400 F (38400bps fixed)

### <MAIN, SUB Display Contents>

MAIN	SUB
0 : No SD (No abnormality)	0 : No sub category
5 : Speaker shortcircuited	0 : No sub category
6 : Module u-com communication NG	0 : No sub category
8 : IIC communication NG	1 : EEPROM communication NG
	3 : VIDEO SLOT IC1 (CVBS) communication NG
	4 : VIDEO SLOT IC1 (Y/C) communication NG
	5 : A/D Main (A line) communication NG
	6 : A/D Main (B line) communication NG
	7 : IC6 communication NG
	F : VIDEO SLOT EEPROM communication NG
	J : AUDIO CONTROL IC communication NG
	K : Expand I/O2 communication NG
A : FAN stop	1 : FAN stop
B : Abnormal in temperature (high temperature)	1 : Thermal sensor 1 high temperature
	2 : Thermal sensor 2 high temperature
	3 : Thermal sensor 3 high temperature
	4 : Thermal sensor 4 high temperature
D : Abnormal in Power supply	0 : No sub category
8 : Other abnormality	1 : RLS cable pulled out
	2 : DC power down for COMM SLOT
	3 : DC power down for VIDEO SLOT
8 : NG except above item (main u-com NG)	0 : No sub category

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# 5.4 FACTORY MODE

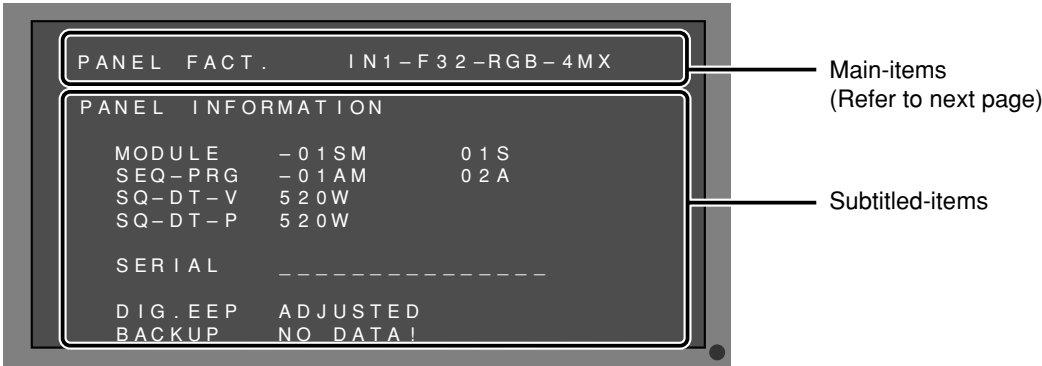
A

## How to enter Factory Mode

[Syandby state] ⇒ [DISPLAY] key ⇒ Not press key for 3 seconds ⇒ Press [LEFT], [UP], [LEFT], [RIGHT], [POWER] key sequentially.

B

## Top screen of the Panel Factory

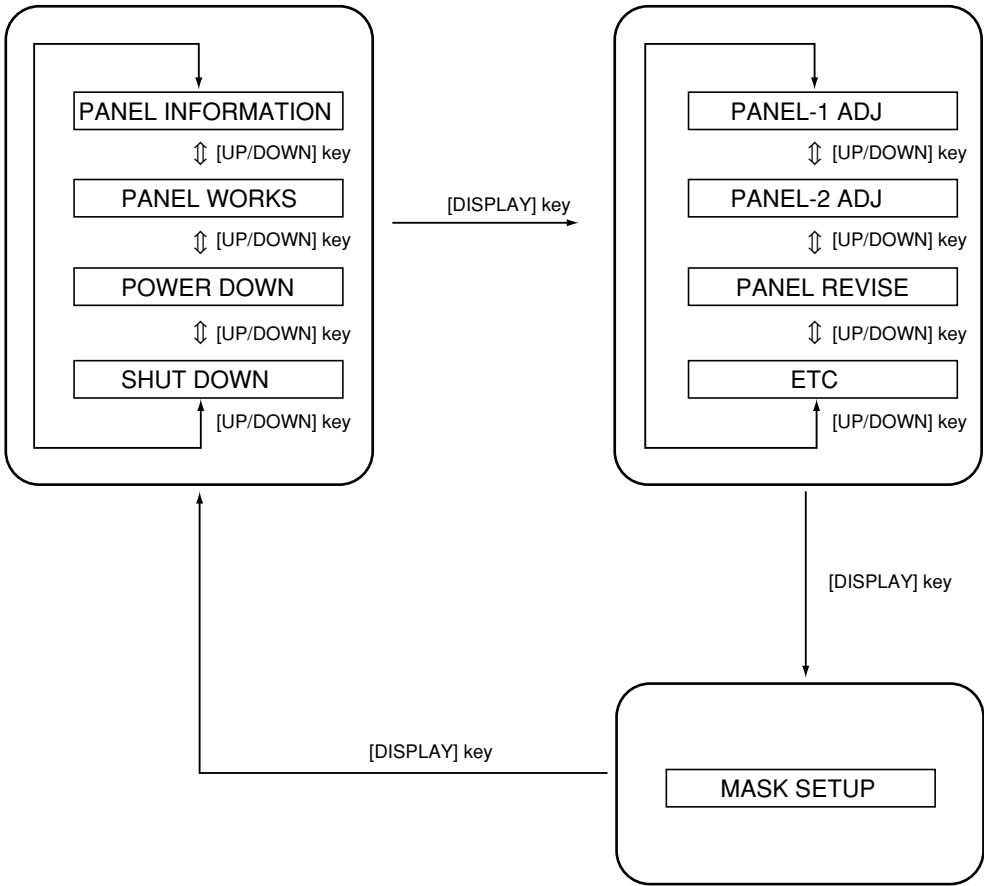


C

**Note:** With this model, the structure of Factory mode has been changed, and all items related to the Panel are gathered into PANEL FACTORY mode.

D

## Factory Menu Construction



## Main-item indications

Four parameters are displayed:



### 1 Input function

Input Functions (response)	MAIN INPUT
"IN 1"	INPUT1
"IN 2"	INPUT2
"IN 3"	INPUT3
"IN 4"	INPUT4
"IN 5"	INPUT5
"***"	Unspecified (at standby)

### 4 Option

Institutional use system (6th generation) display : 4MX

### 2 SIG mode and screen size

Note: See SIG-Mode Tables. (See next page.)

### 3 Color system

Color System (response)	Signal Type	Color System	Color System (response)	Signal Type	Color System
"NTV"	CVBS	NTSC	"4NS"	Y/C	4.43NTSC
"PLV"		PAL	"PMS"		PAL M
"SCV"		SECAM	"PNS"		PAL N
"4NV"		4.43NTSC	"BWS"		Unable to discriminate/No signal
"PMV"		PAL M	"CBR"	COMPONENT	Y/Cb/Cr
"PNV"		PAL N	"PBR"		Y/Pb/Pr
"BWV"		Unable to discriminate/No signal	"RGB"		RGB
"NTS"	Y/C	NTSC	"DIG"	PC ANALOG	
"PLS"		PAL		DIGITAL VIDEO	
"SCS"		SECAM		PC DVI	

• Refer to the "6.5 FACTORY MODE" on ARP3340(PDP-425CMX\_Page 77).

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## Specifications

### General (PDP-42MXE20)

Light emission panel ..... 42V type AC Plasma Panel  
92.16 cm (W) x 51.53 cm (H) x 105.59 cm (diagonal)  
Number of pixels ..... 1024 x 768  
Power supply ..... AC 100 V to 240 V, 50 Hz/60 Hz  
Rated current ..... 3.0 A to 1.3 A  
Standby power consumption ..... 1.5 W  
External dimensions  
..... 1022 mm (W) x 610 mm (H) x 98 mm  
(D: Not including handles)  
..... (including display stand)  
..... 1218 mm (W) x 737 mm (H) x 300 mm (D)  
Weight ..... 30.5 kg  
..... (including display stand) ..... 31.1 kg  
Operating temperature range ..... 0 °C to 40 °C

### Input/output Video

INPUT1  
Input Mini D-sub 15 pin (socket connector)  
RGB signal (G ON SYNC compatible)  
RGB ... 0.7 Vp-p/75 Ω /no sync.  
HD/VS, VD ... TTL level/  
positive and negative polarity/  
2.2 kΩ  
G ON SYNC  
... 1 Vp-p/75 Ω /negative sync.  
\*Compatible with Microsoft “Plug & Play”  
(VESA DDC 1/2B)  
Output Mini D-sub 15 pin (socket connector)  
75 Ω /with buffer

INPUT2  
Input DVI-D 24-pin connector  
Digital RGB signal (DVI compliant TMDS  
signal)  
\*Compatible with Microsoft “Plug & Play”  
(VESA DDC 2B)

Audio  
Input AUDIO INPUT (for INPUT1)  
Stereo mini jack  
L/R ... 500 mVrms/more than 10 kΩ  
AUDIO INPUT (for INPUT2)  
Stereo mini jack  
L/R ... 500 mVrms/more than 10 kΩ  
Output AUDIO OUTPUT  
Stereo mini jack  
L/R ... 500 mVrms (max)/less than 5 kΩ  
SPEAKER  
PDP-427CMX  
L/R ... 6 Ω to 16 Ω /8 W +8 W (at 6 Ω )

Control  
RS-232C ... D-sub 9 pin (pin connector)  
COMBINATION IN/OUT  
... Mini DIN 6 pin (x2)

Accessories	
Power cord (2 m/6.6 feet) .....	1
Remote control unit .....	1
AA (R6) batteries .....	2
Cleaning cloth (for screen) .....	1
Speed clamps .....	3
Bead bands .....	3
Ferrite cores (for audio cables).....	3
Ferrite cores (PDP-42MXE20: for power cord).....	2
Cable ties (PDP-42MXE20) .....	2
Display stands (PDP-42MXE20) .....	2
Washers .....	2
Hex hole bolts (M8 x 40 mm) (PDP-42MXE20) .....	2
Remote control unit holder (PDP-42MXE20) .....	1
Operating Instructions .....	1
Operating Instructions (CD-ROM) .....	1
Start up Guide .....	1
Warranty .....	1

• Due to improvements, specifications and design are subject to change without notice.

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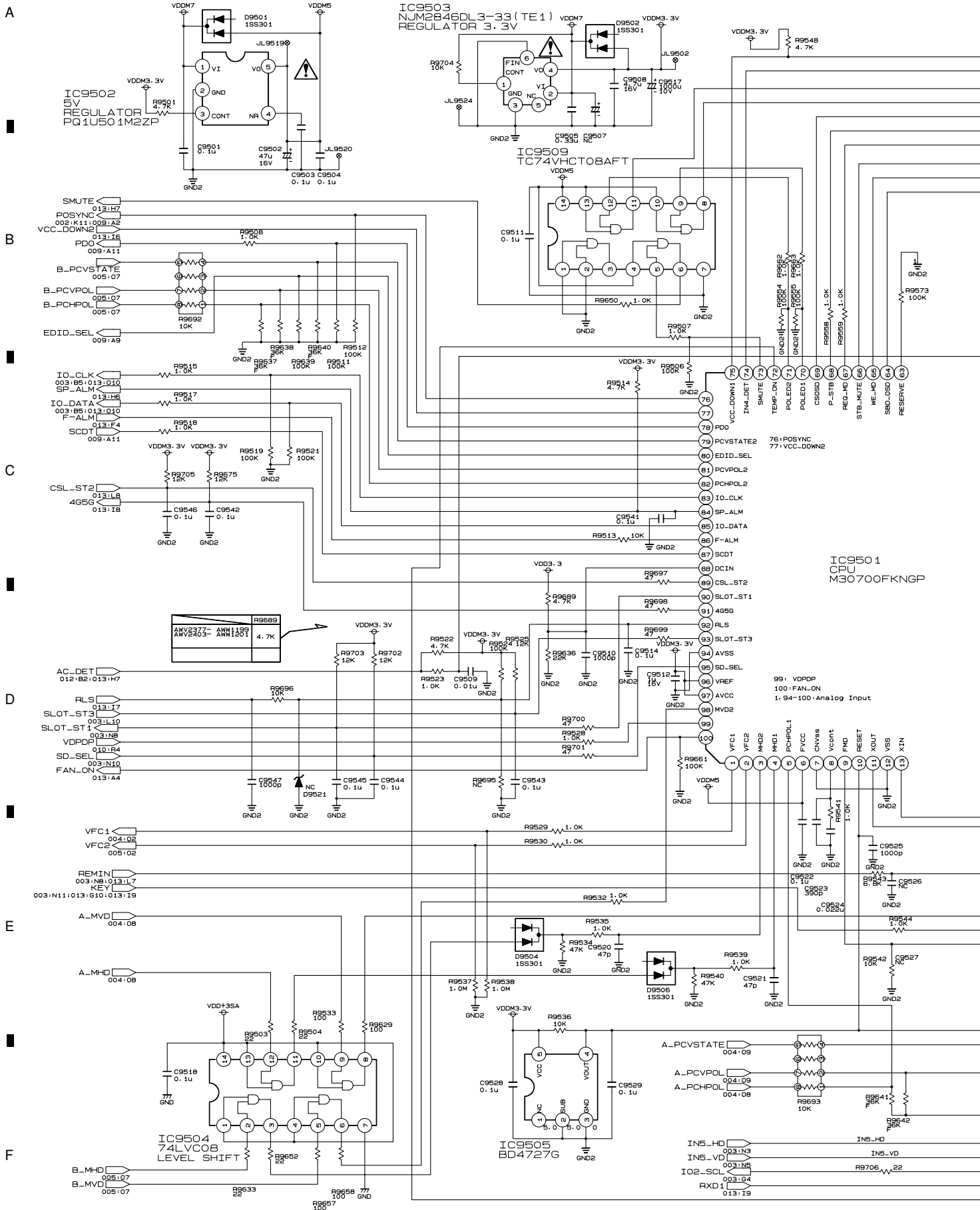
8

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PDP-42MXE20

# 7. SCHEMATIC DIAGRAM

## 7.1 MAIN ASSY [CPU BLOCK] (1/13)



# MAIN ASSY (1/13)

## • CPU BLOCK

A

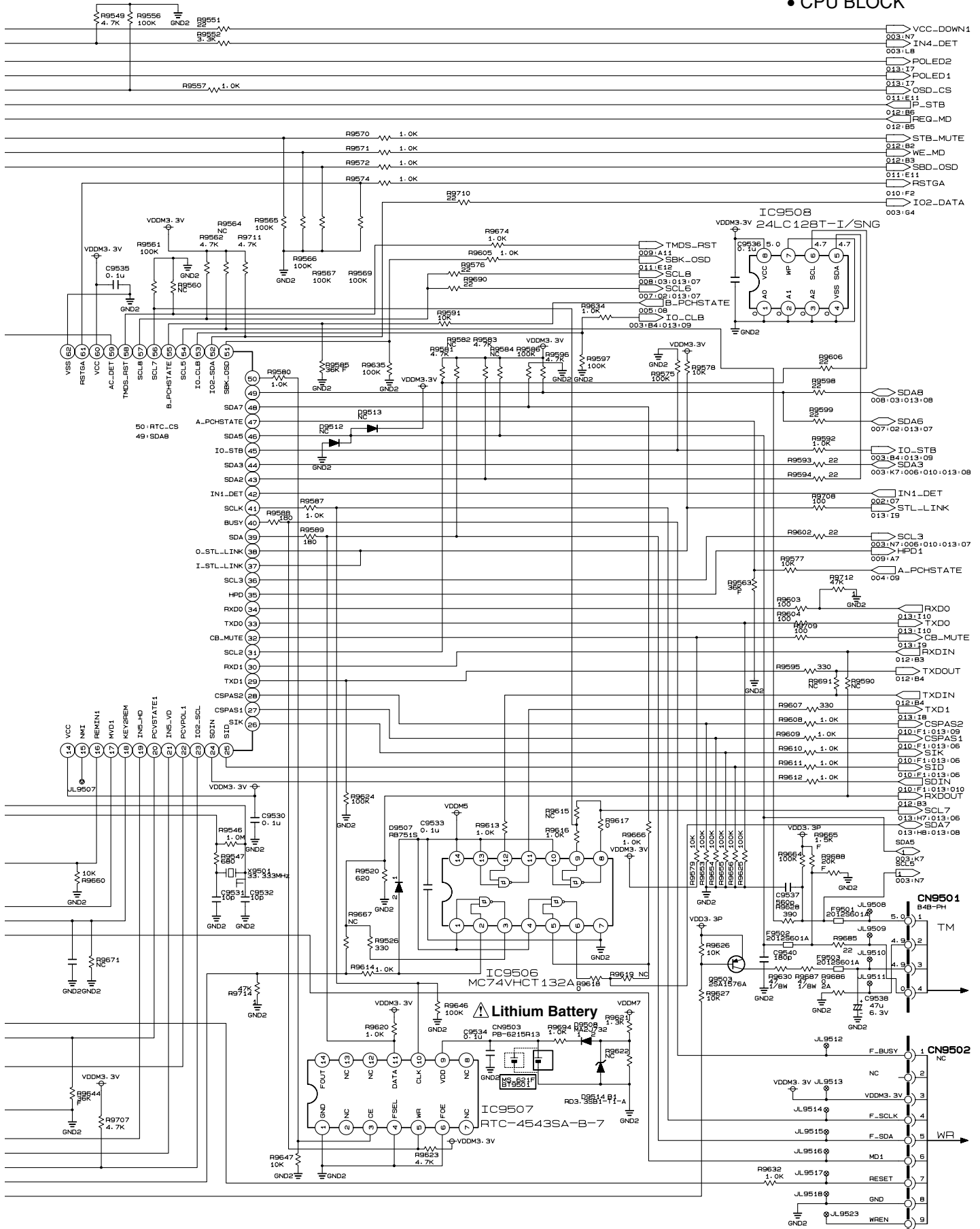
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## 7.2 MAIN ASSY [Interface BLOCK] (2/13)

A

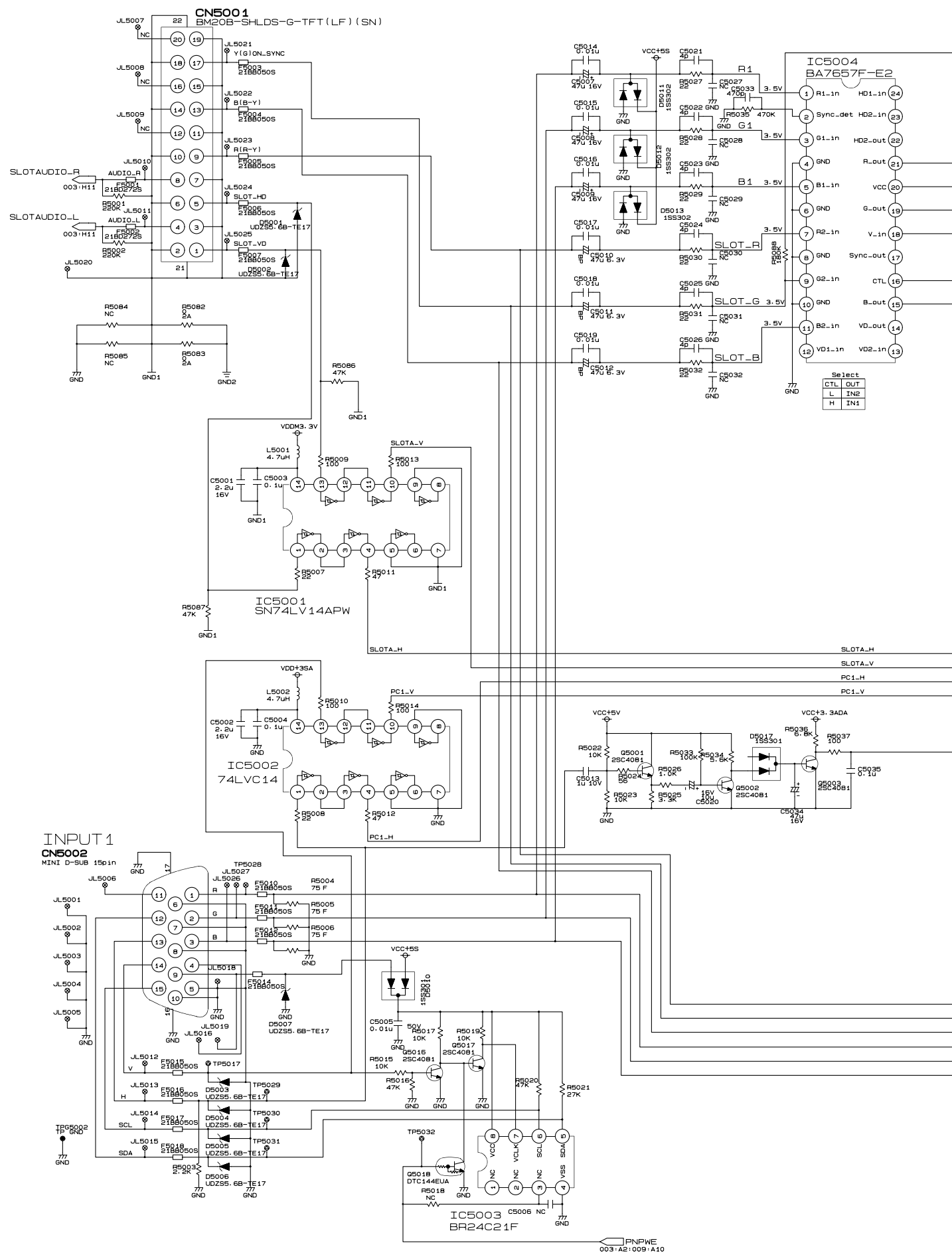
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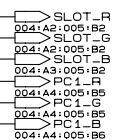
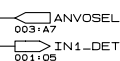
E

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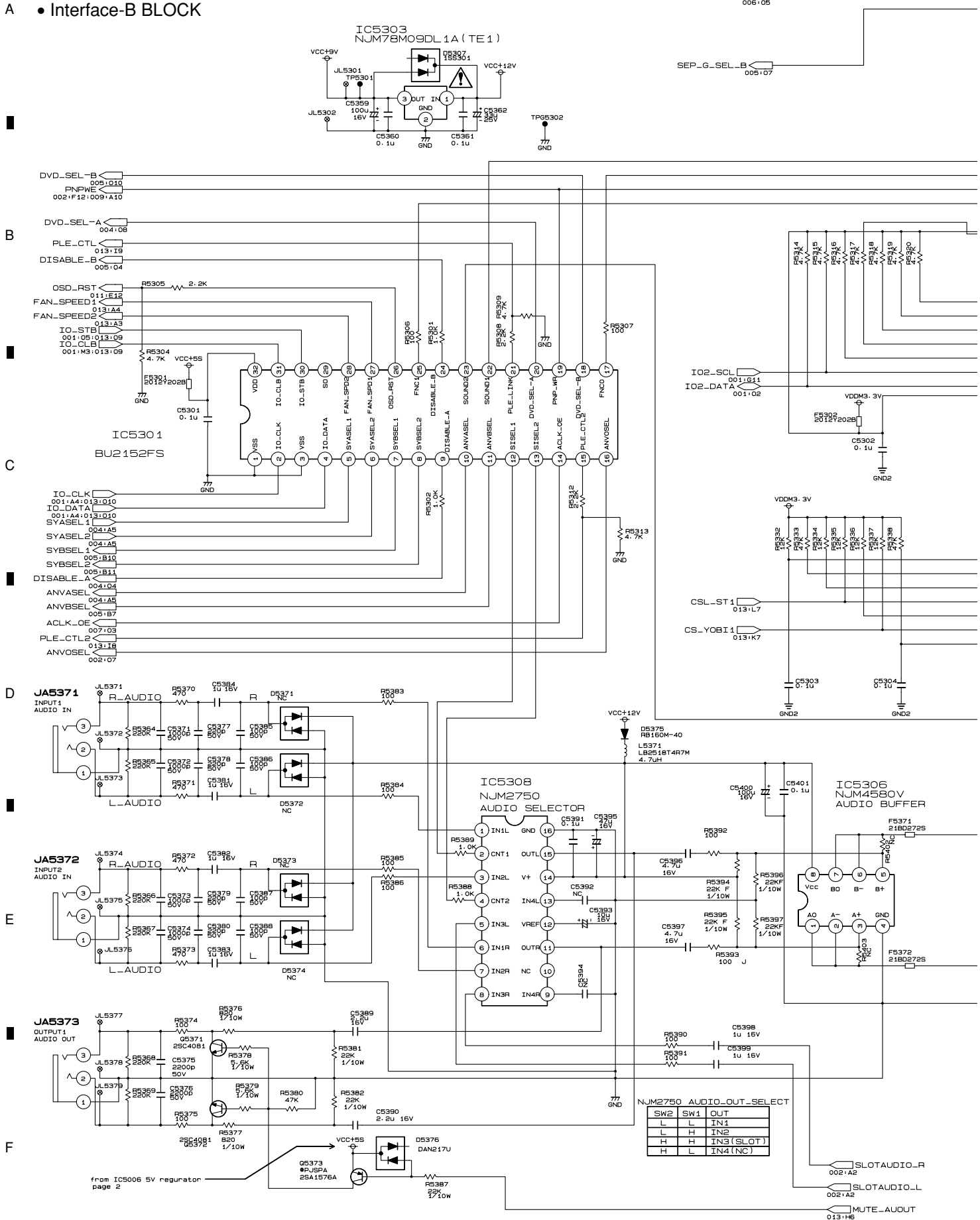
- Interface BLOCK

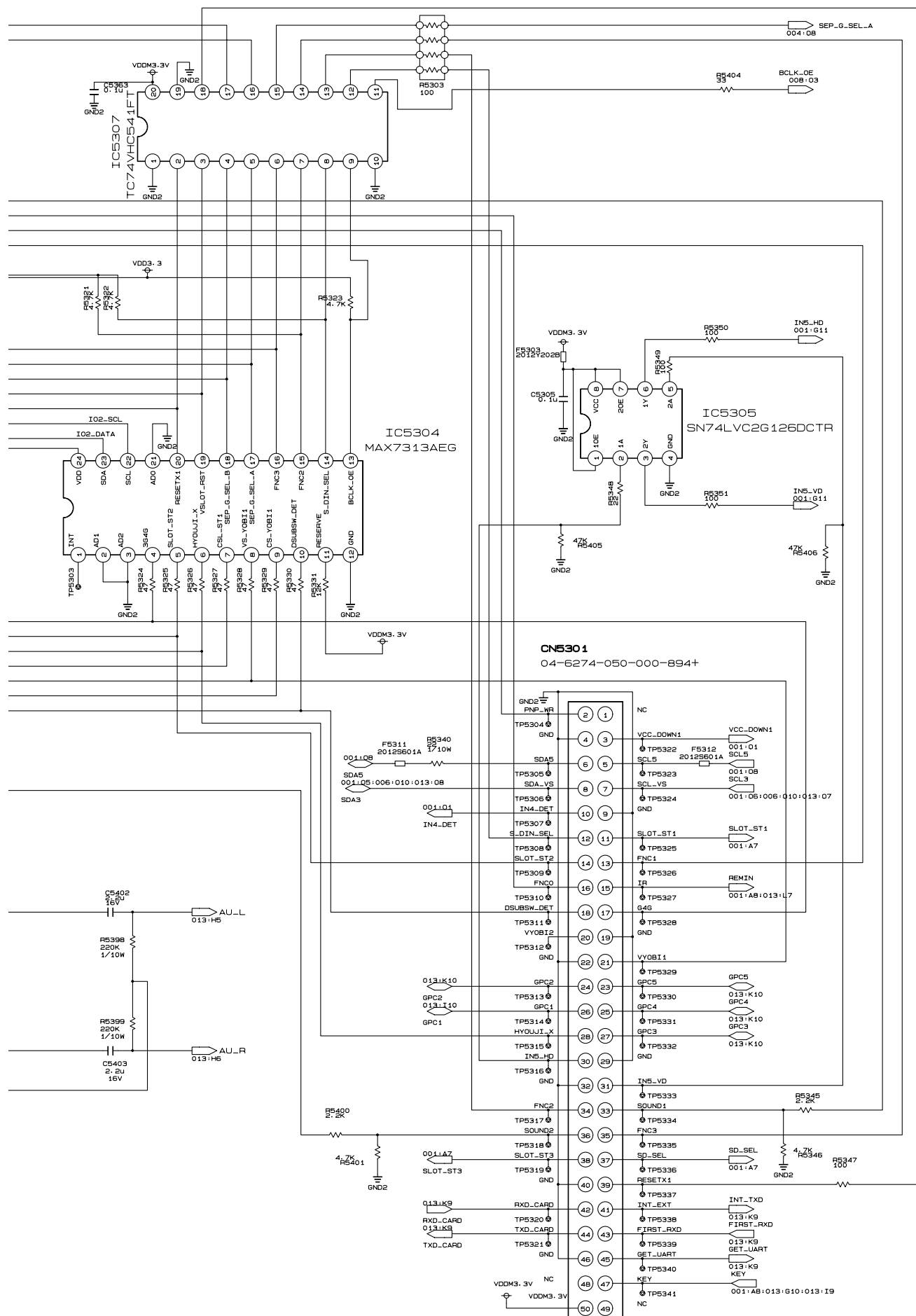


## 7.3 MAIN ASSY [Interface B BLOCK] (3/13)

### MAIN ASSY (3/13)

#### Interface-B BLOCK

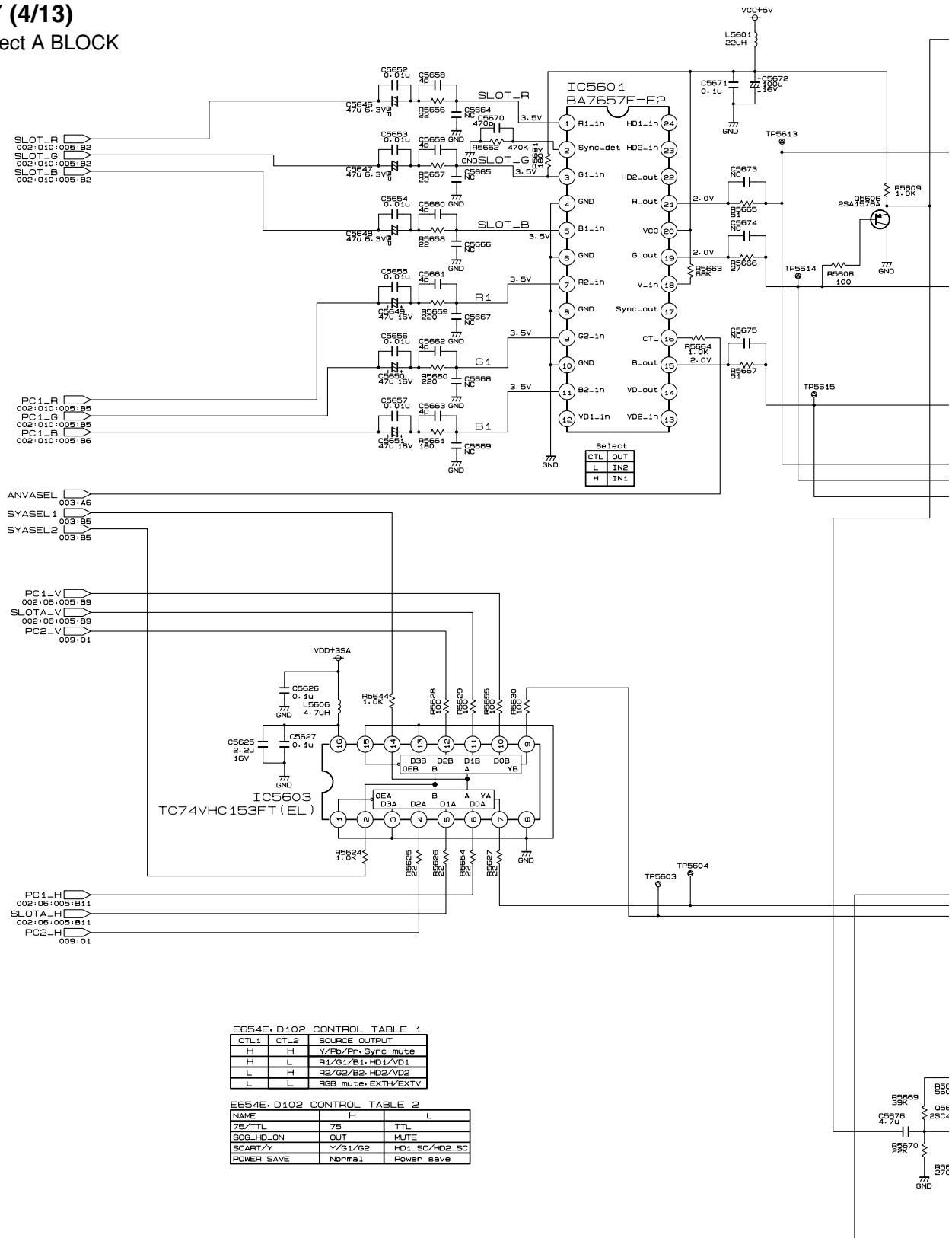


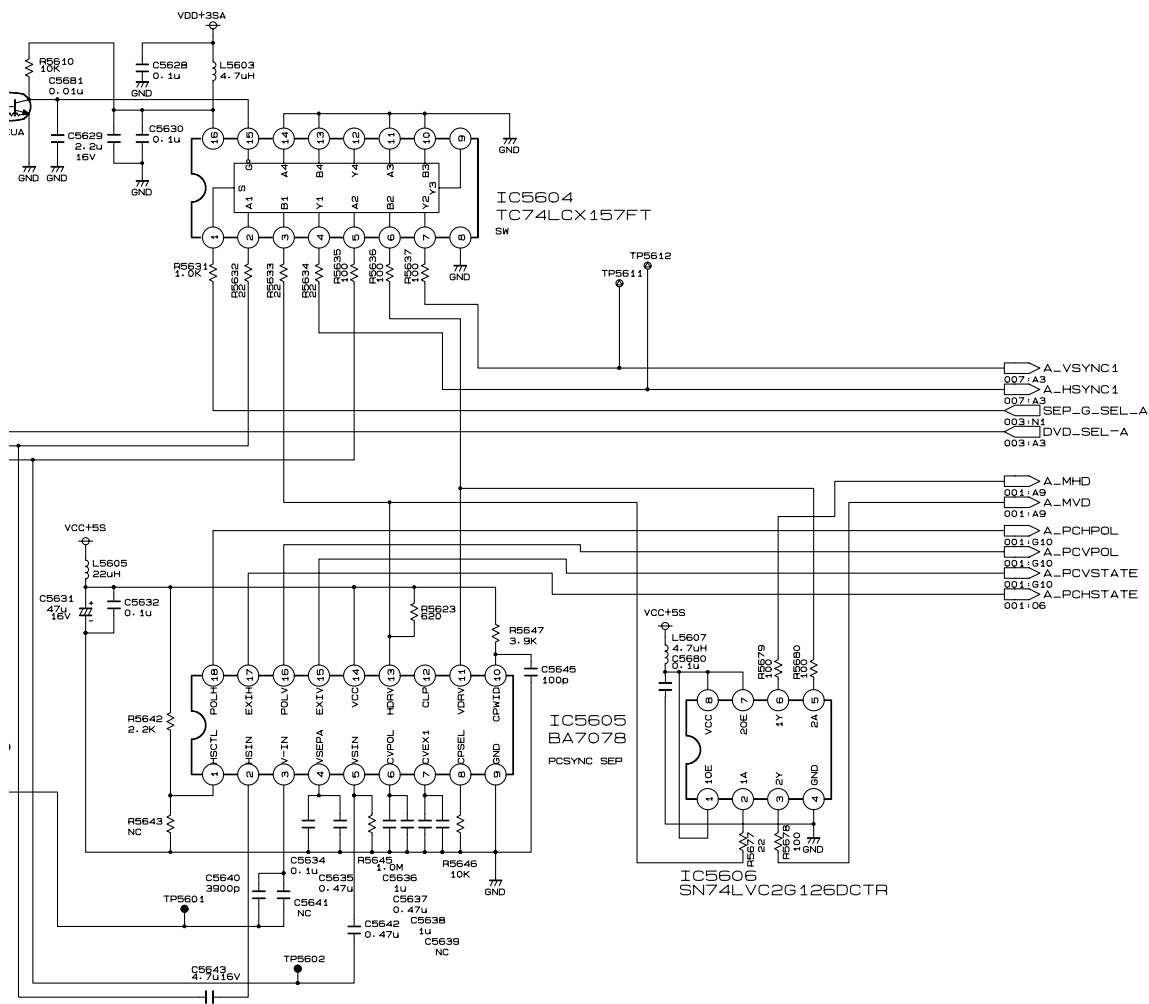
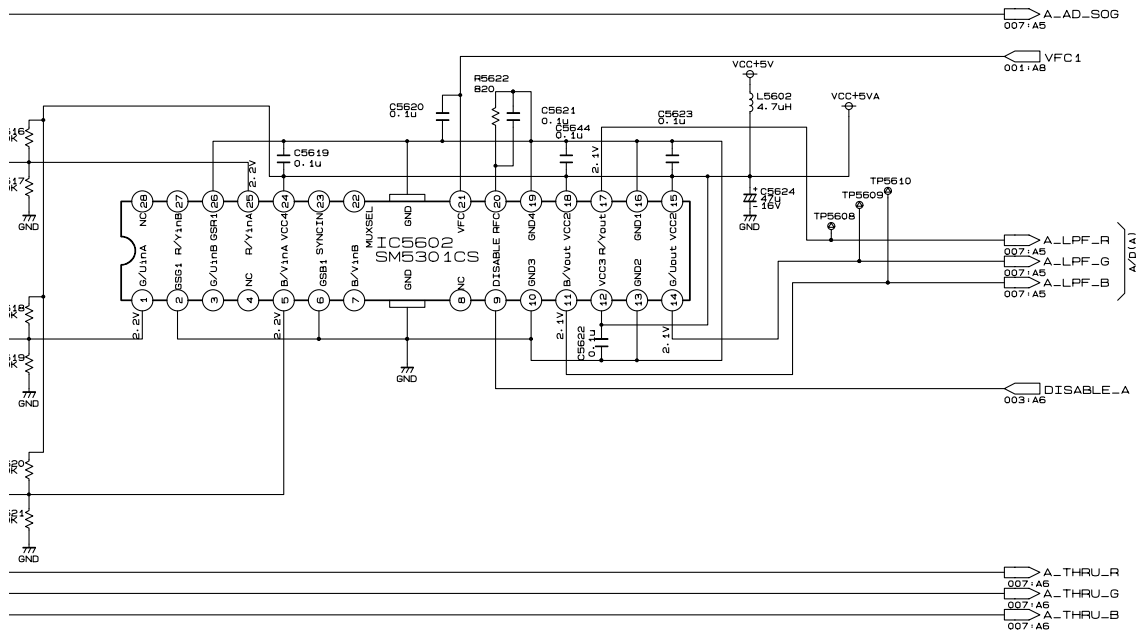


## 7.4 MAIN ASSY [RGB H/V select A BLOCK] (4/13)

### MAIN ASSY (4/13)

#### • RGB H/V select A BLOCK

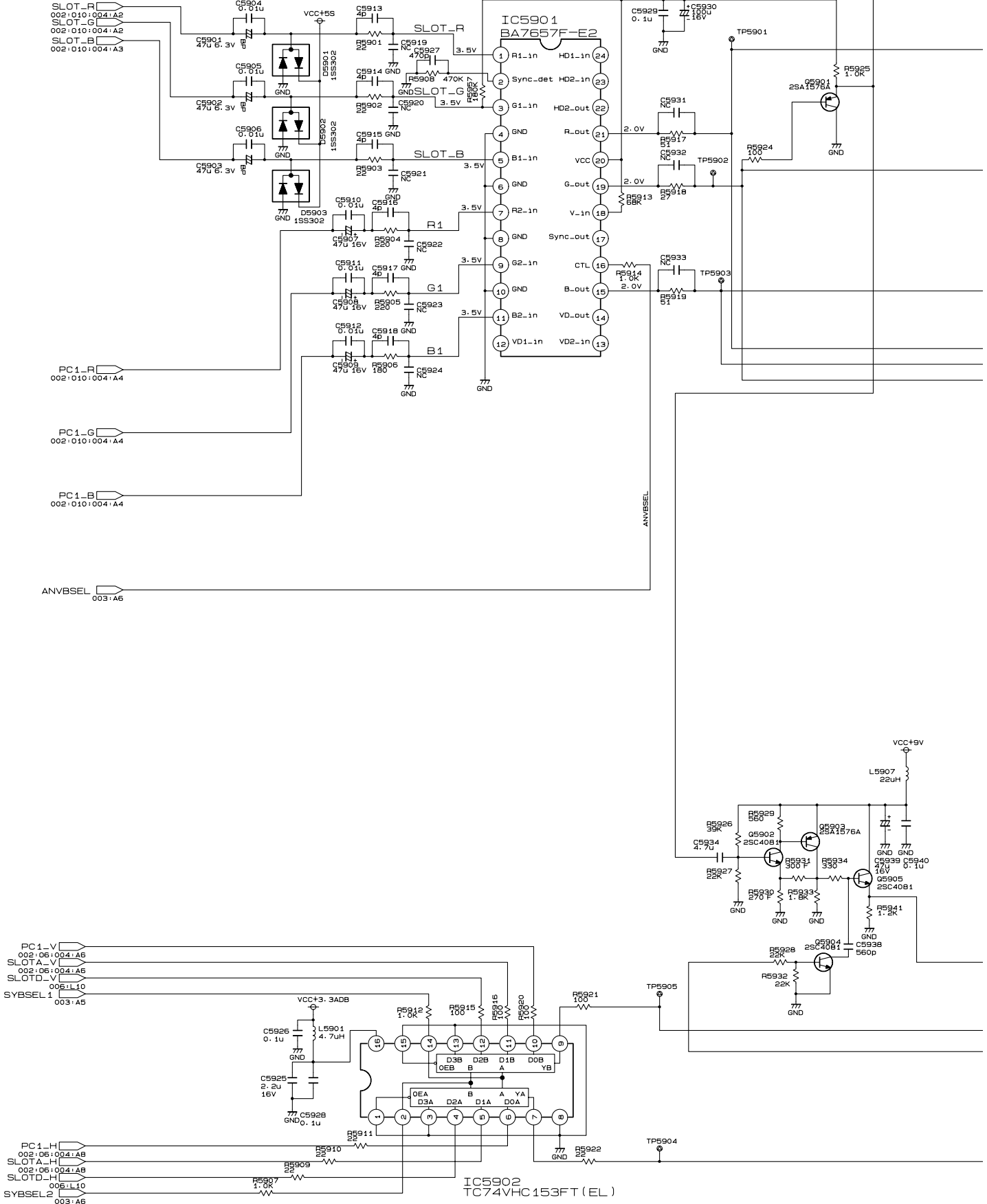




# 7.5 MAIN ASSY [RGB H/V select B BLOCK] (5/13)

## MAIN ASSY (5/13)

### • RGB H/V select B BLOCK

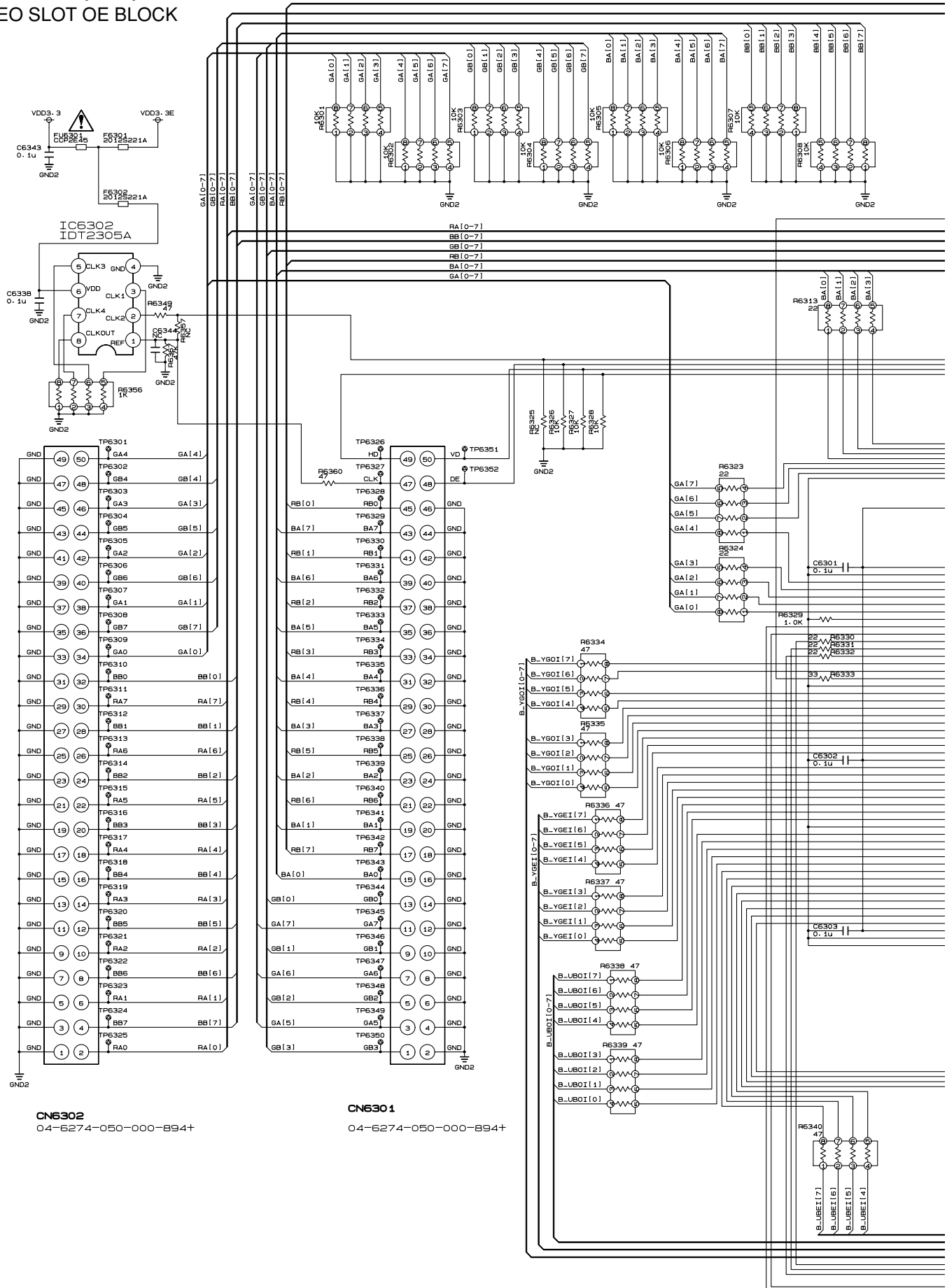




## 7.6 MAIN ASSY [VIDEO SLOT OE BLOCK] (6/13)

### MAIN ASSY (6/13)

#### • VIDEO SLOT OE BLOCK







△

A • A/D A BLOCK



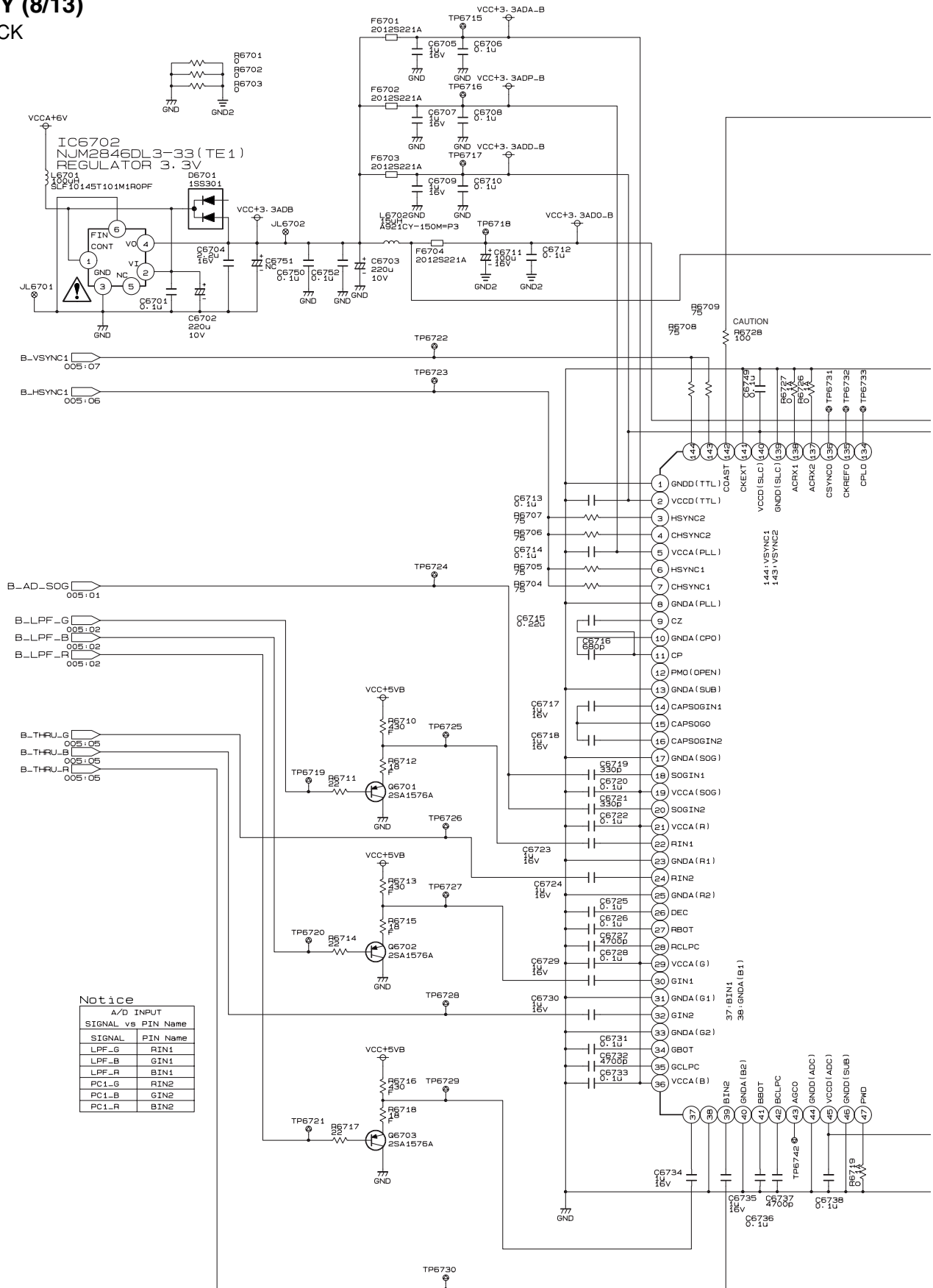
A/D INPUT SIGNAL vs PIN Name	
SIGNAL	PIN Name
LPF_G	RIN1
LPF_B	GIN1
LPF_R	BIN1
PC1_G	RIN2
PC1_B	GIN2
PC1_R	BIN2

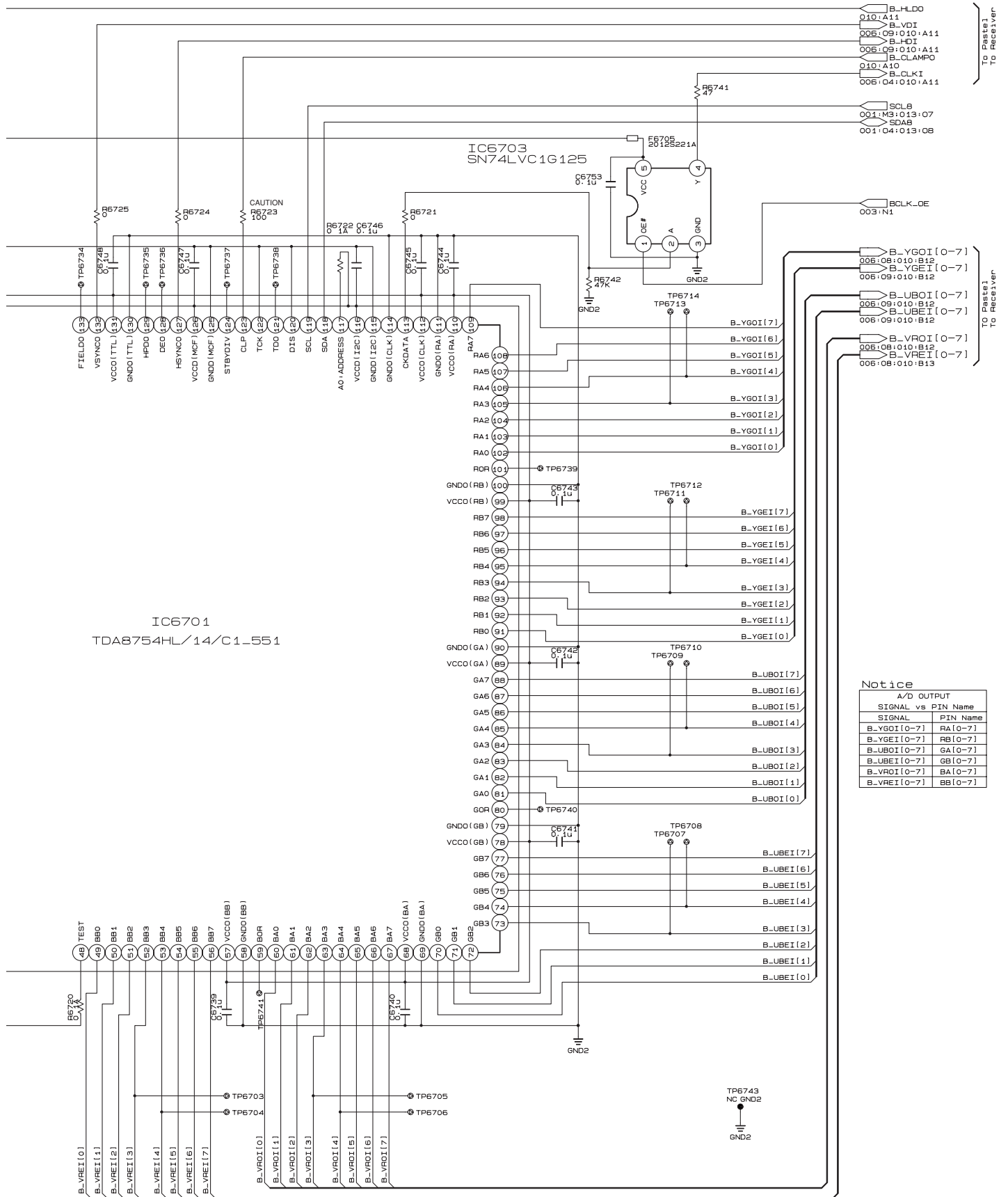


## 7.8 MAIN ASSY [A/D B BLOCK] (8/13)

### MAIN ASSY (8/13)

#### A • A/D B BLOCK

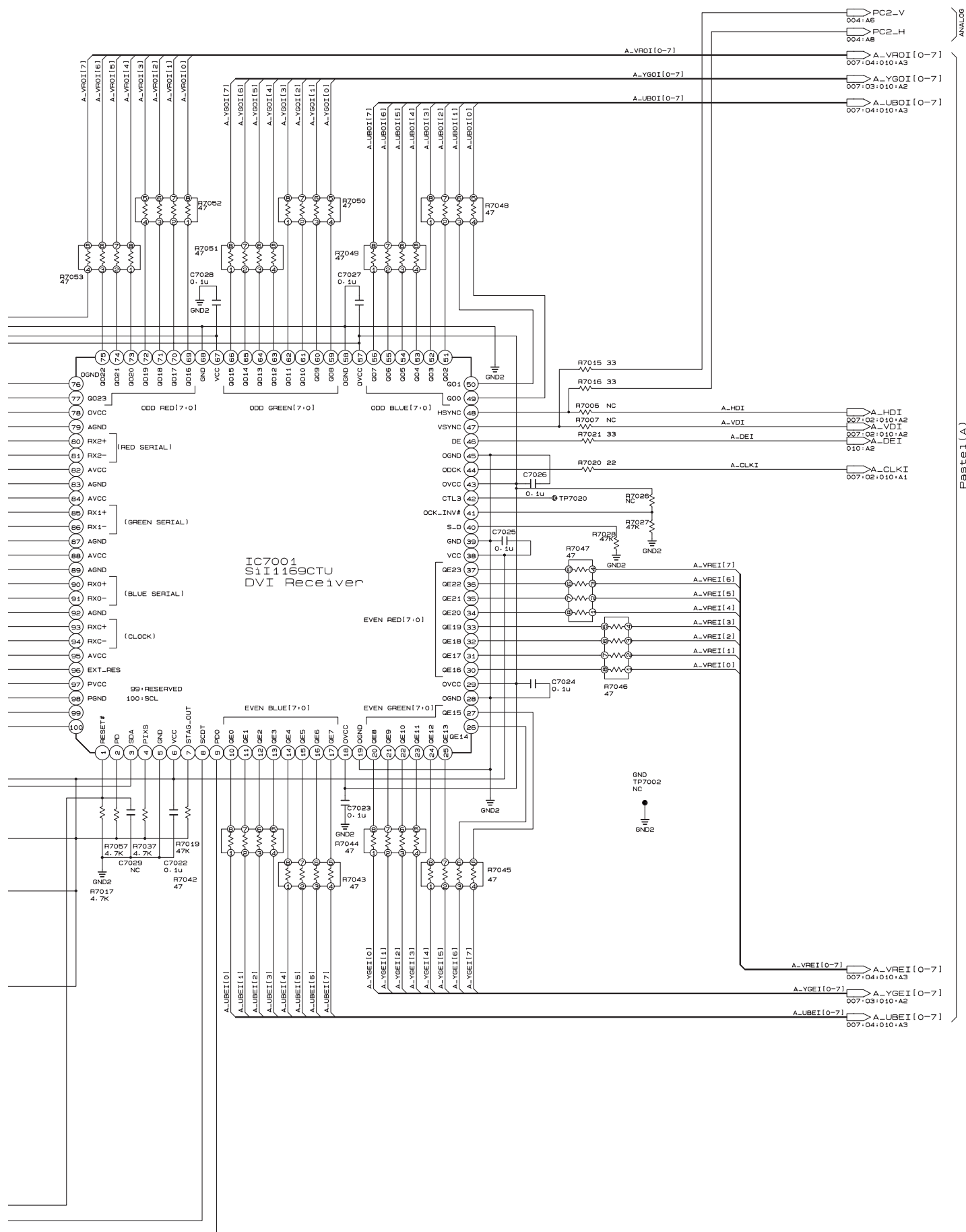




## 4

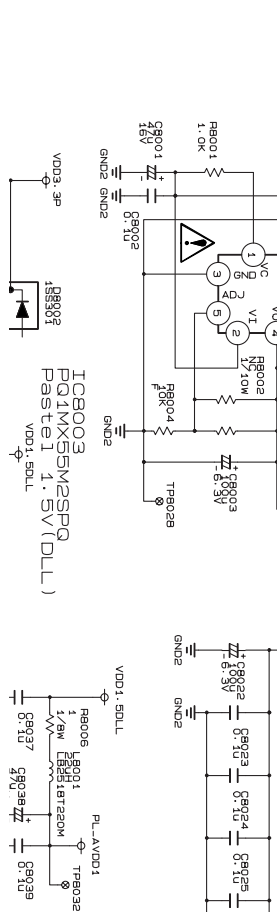
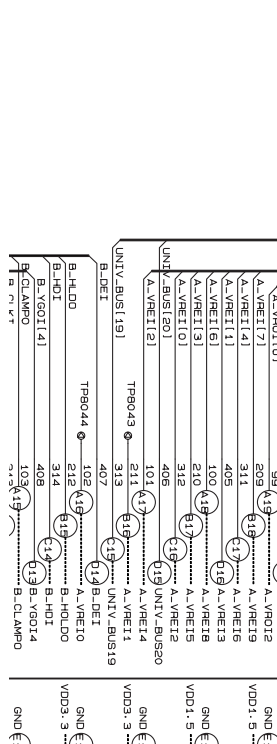
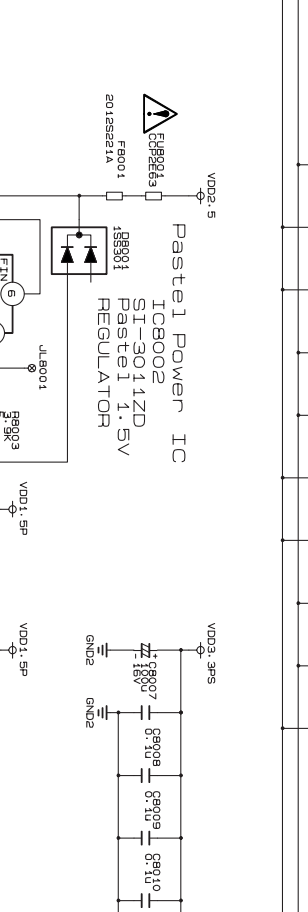
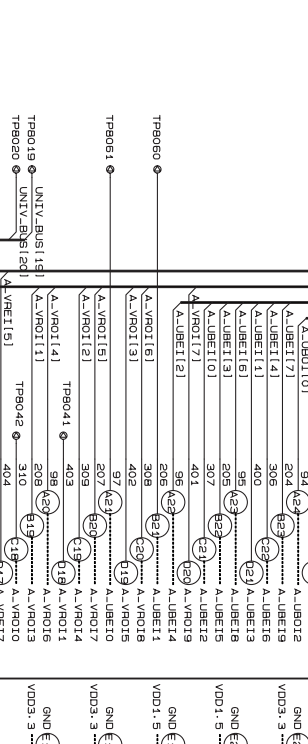
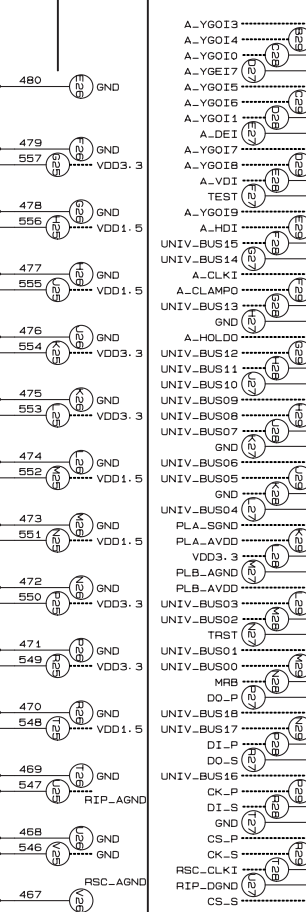
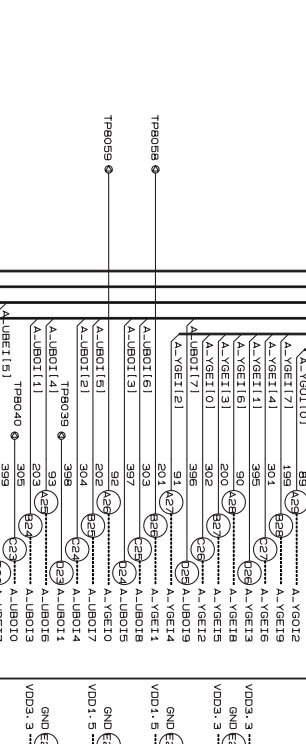
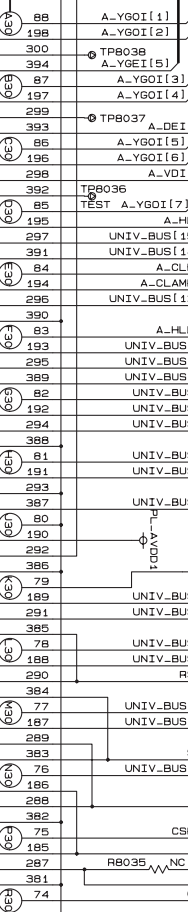
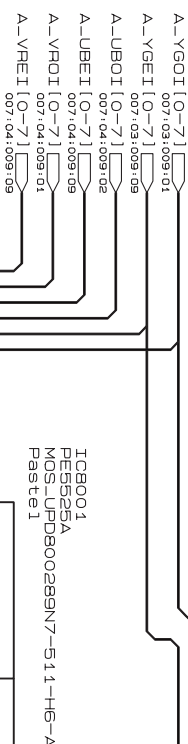
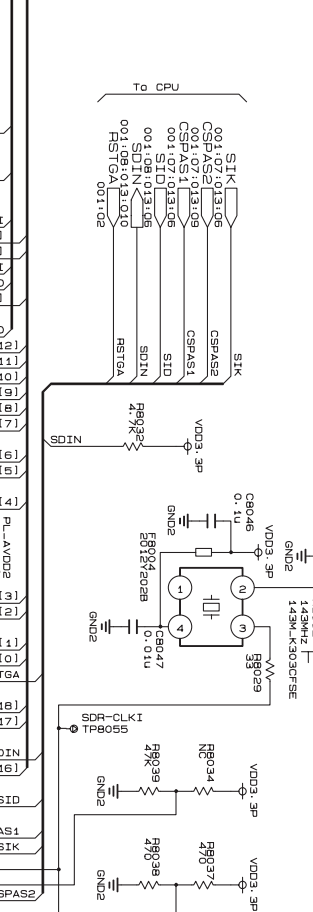
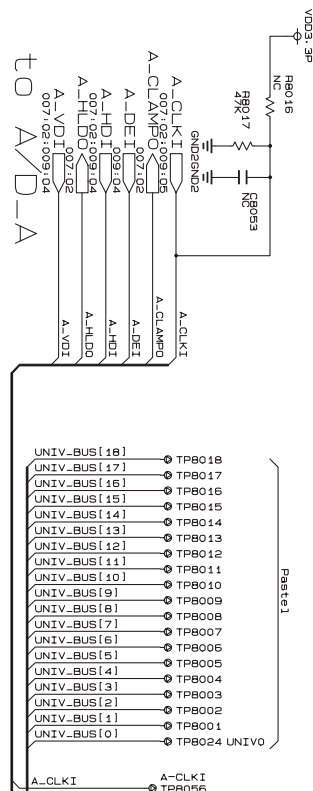
### A • DVI Receiver BLOCK



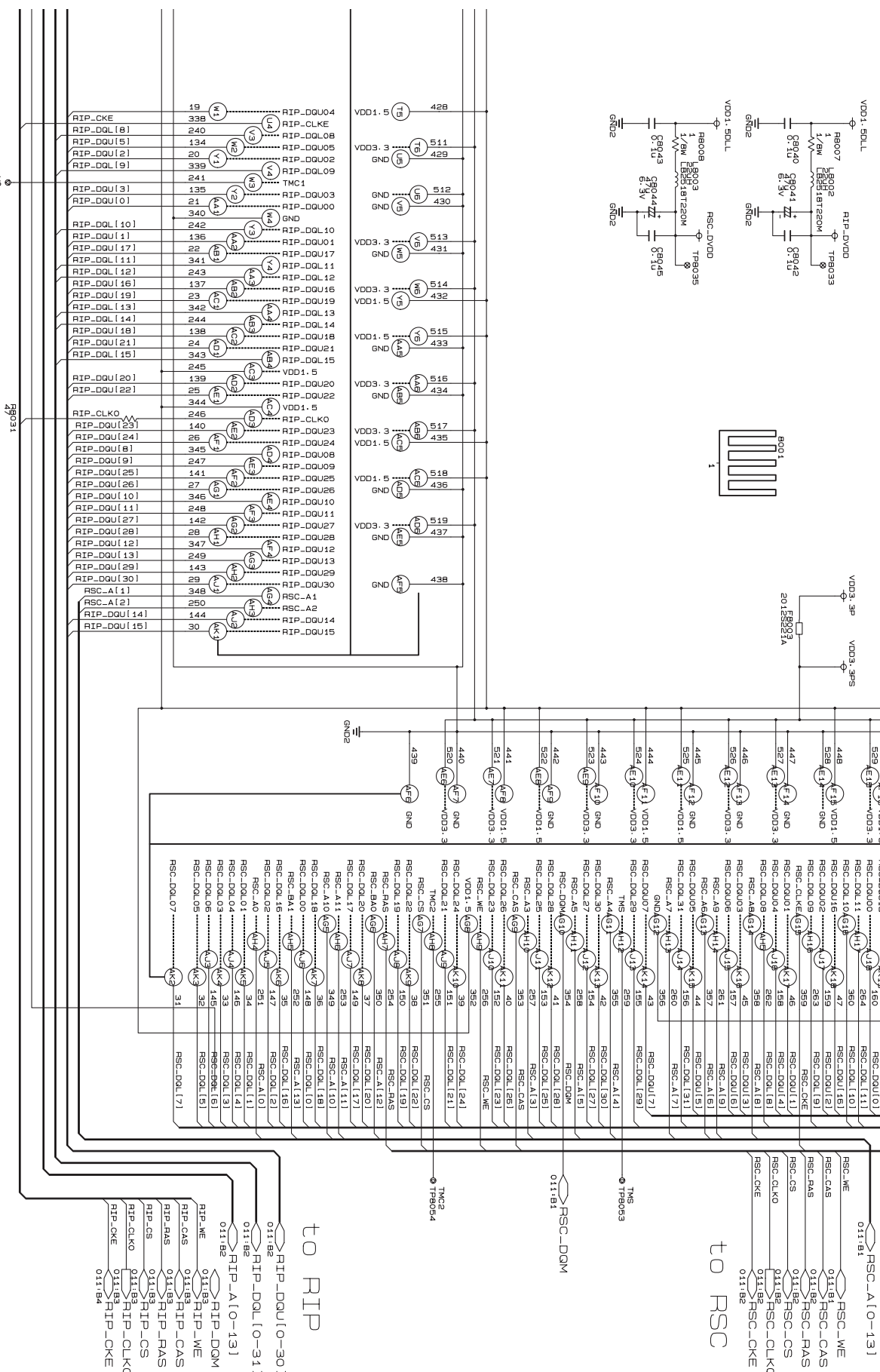
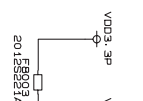
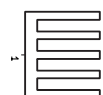






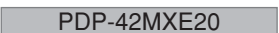


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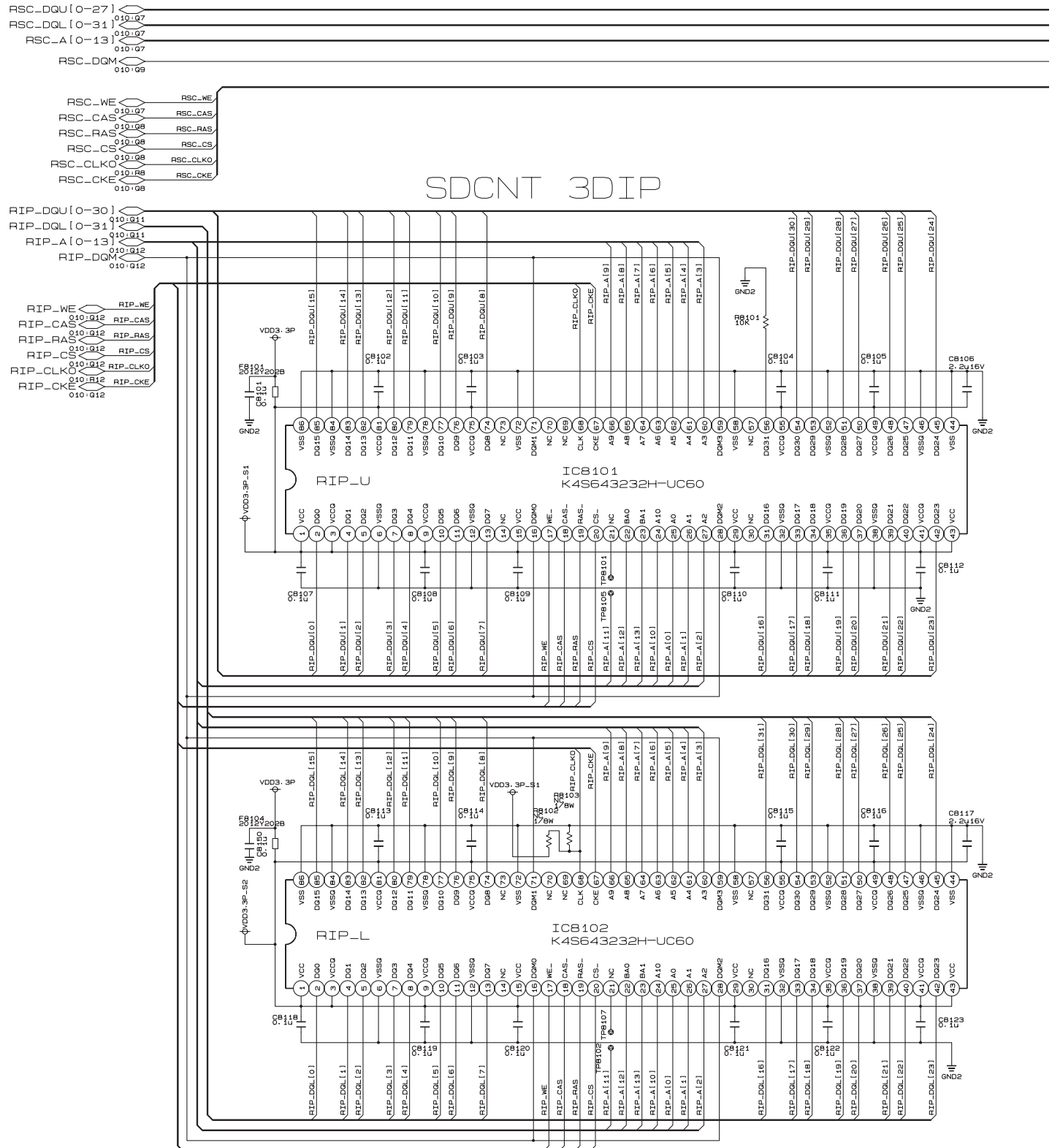
for

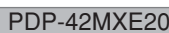


# 7.11 MAIN ASSY [SDRAM OSD BLOCK] (11/13)

## MAIN ASSY (11/13)

### • SDRAM OSD BLOCK



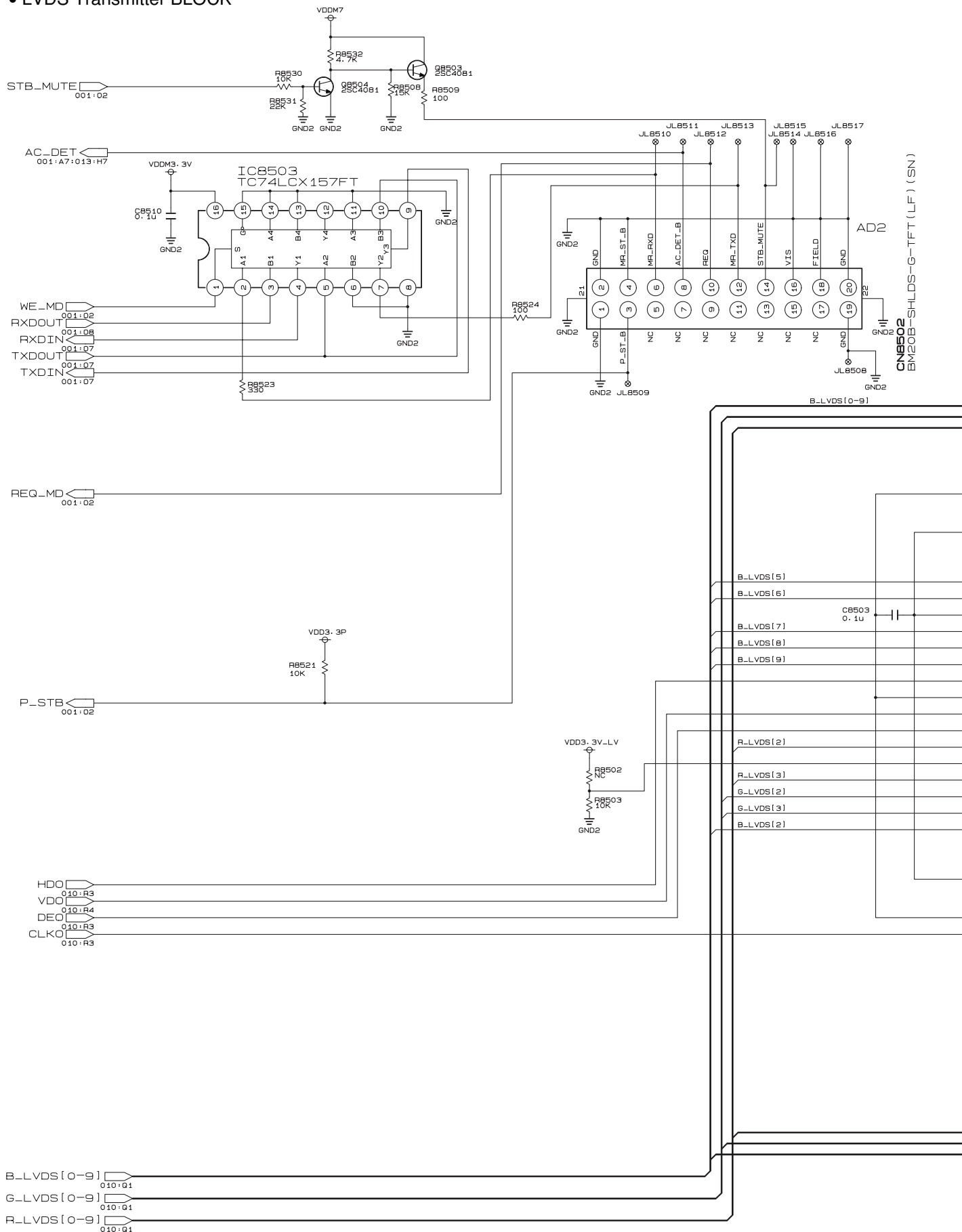


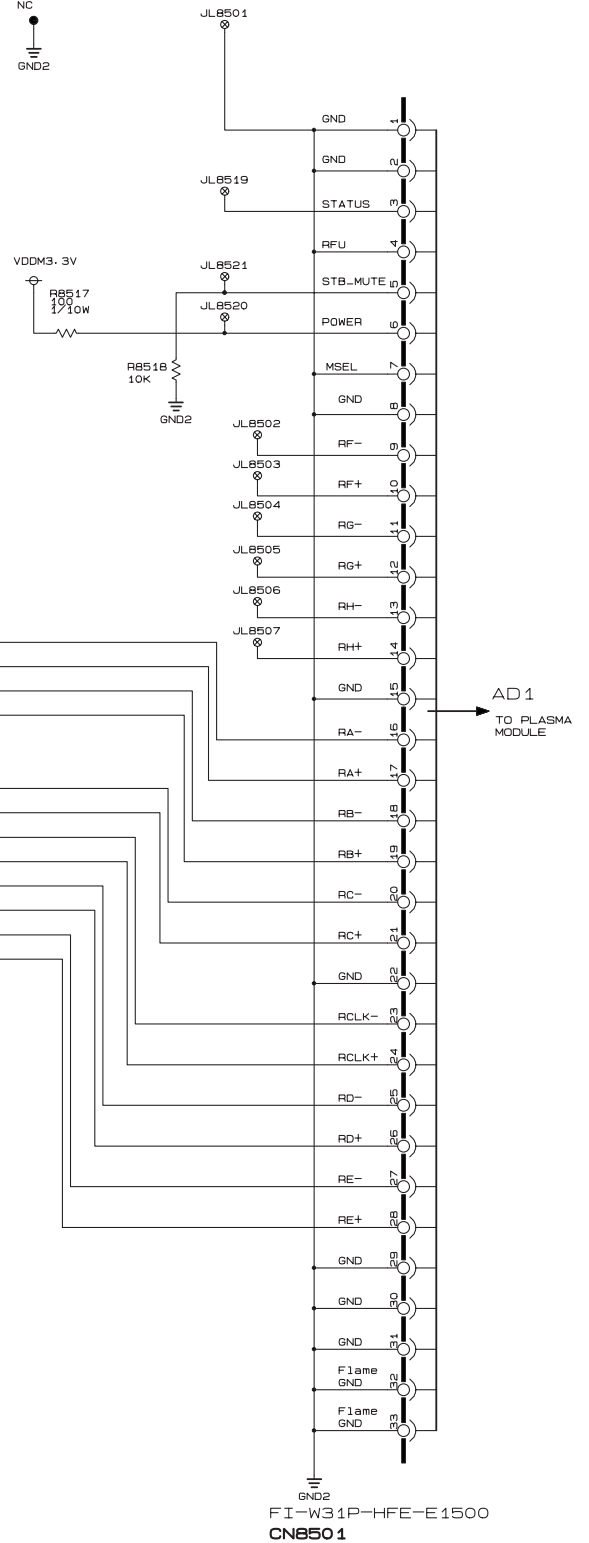


## 7.12 MAIN ASSY [LVDS Transmitter BLOCK] (12/13)

### MAIN ASSY (12/13)

#### • LVDS Transmitter BLOCK



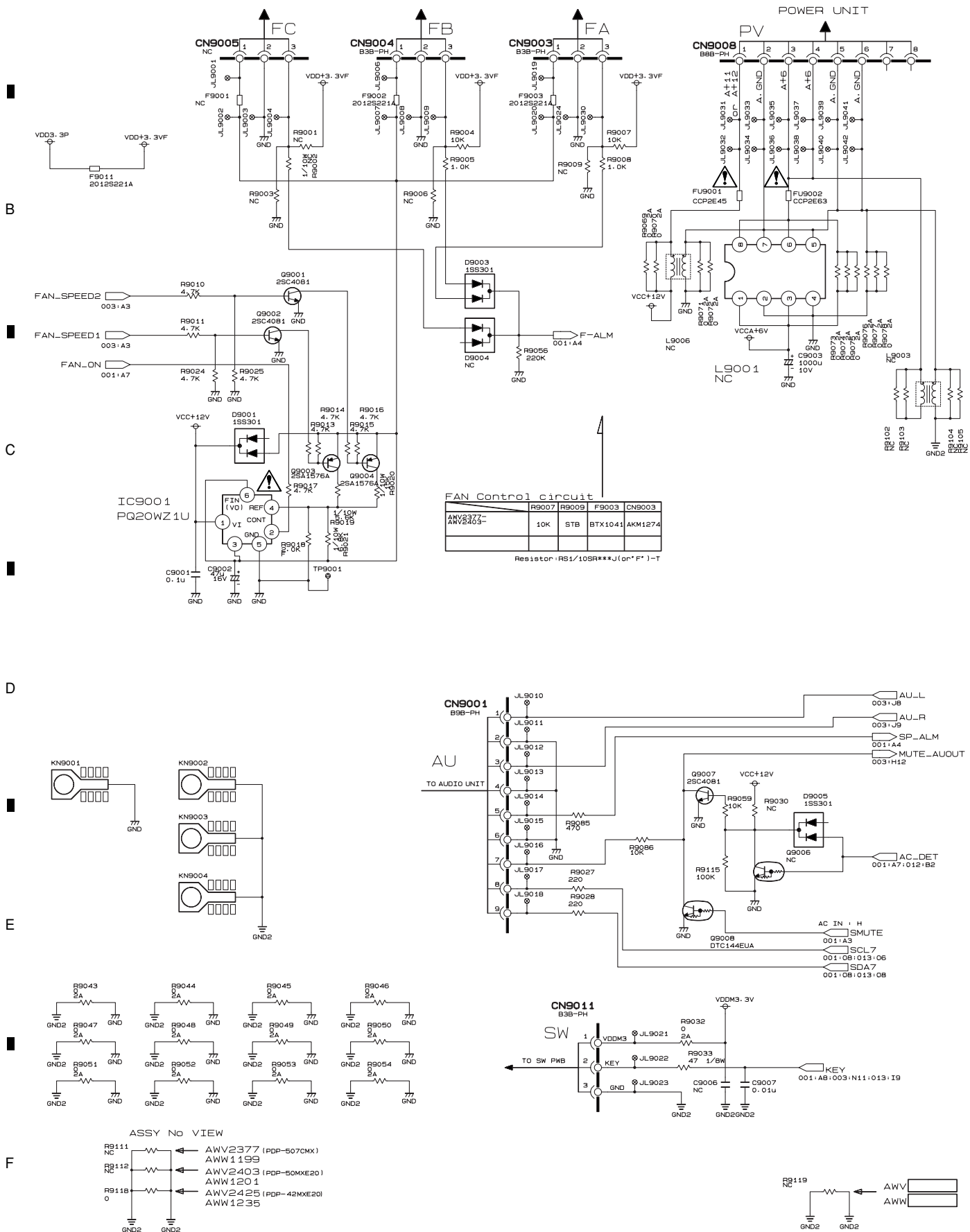




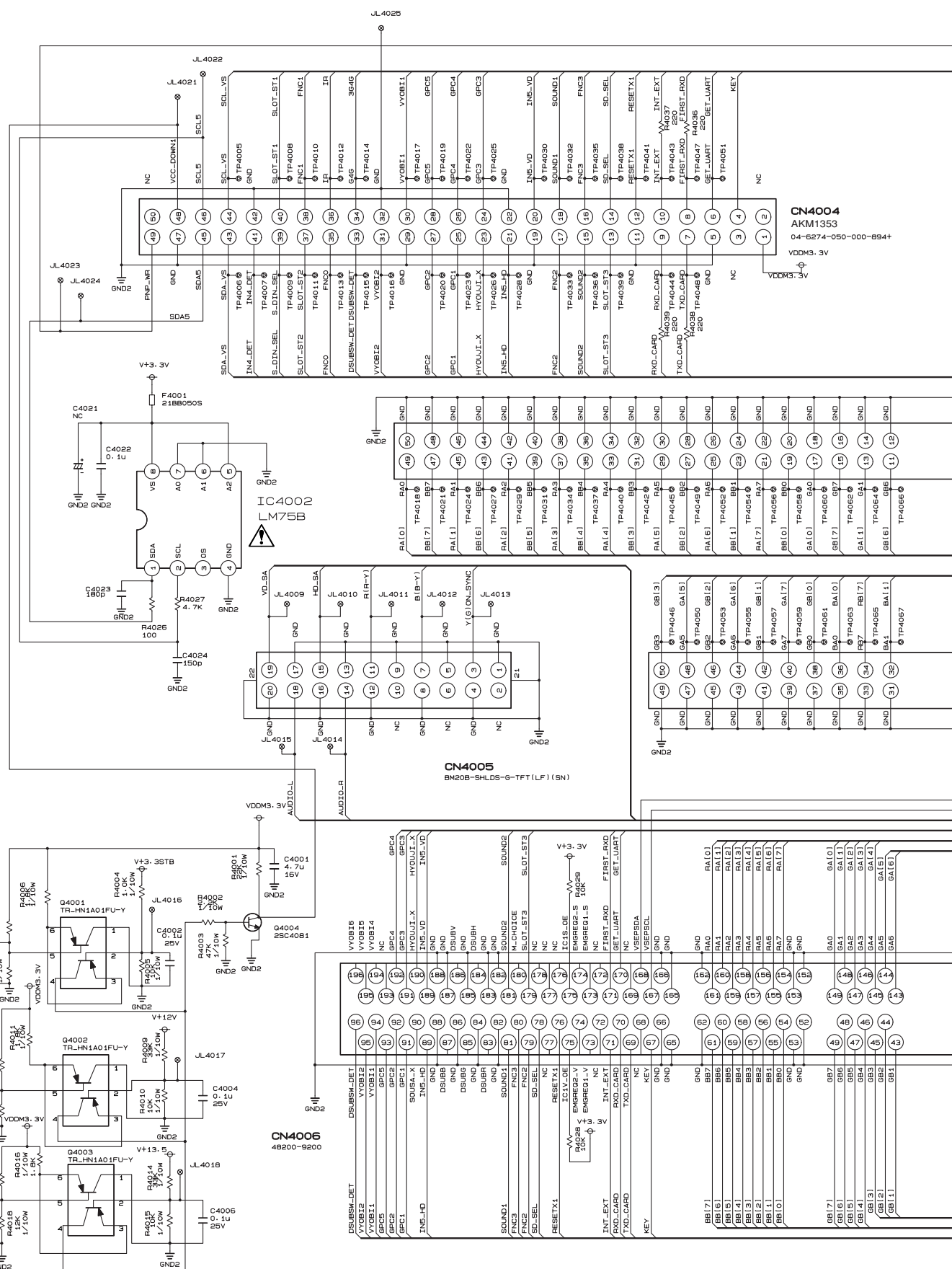
# 7.13 MAIN ASSY [FAN Control etc. BLOCK] (13/13)

## MAIN ASSY (13/13)

### A • FAN Control etc. BLOCK





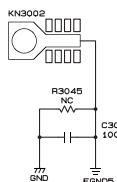
**VSIF ASSY**



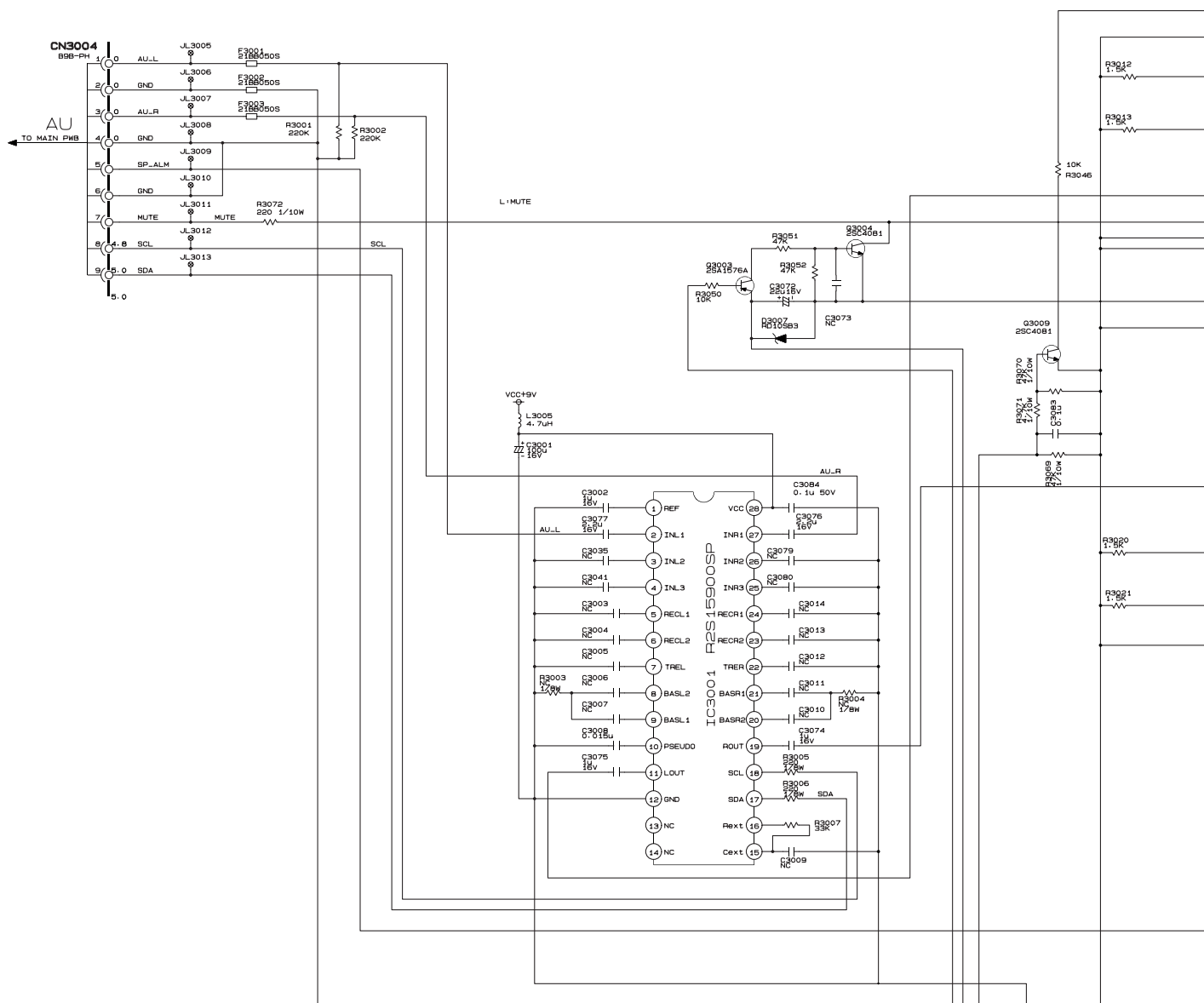
# 7.15 AUDIO ASSY

## AUDIO ASSY

A



B

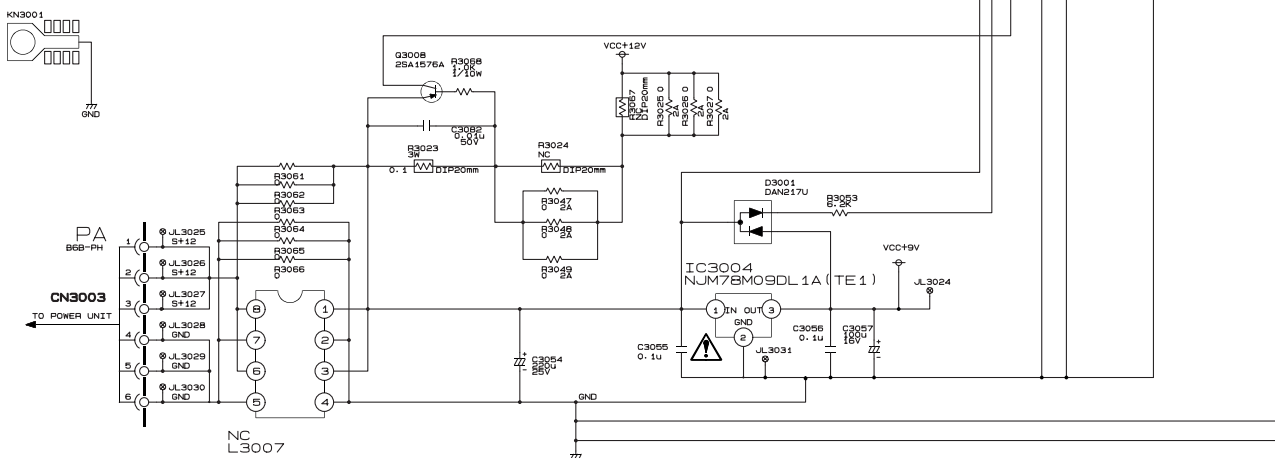


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# 7.16 SENB ASSY

A

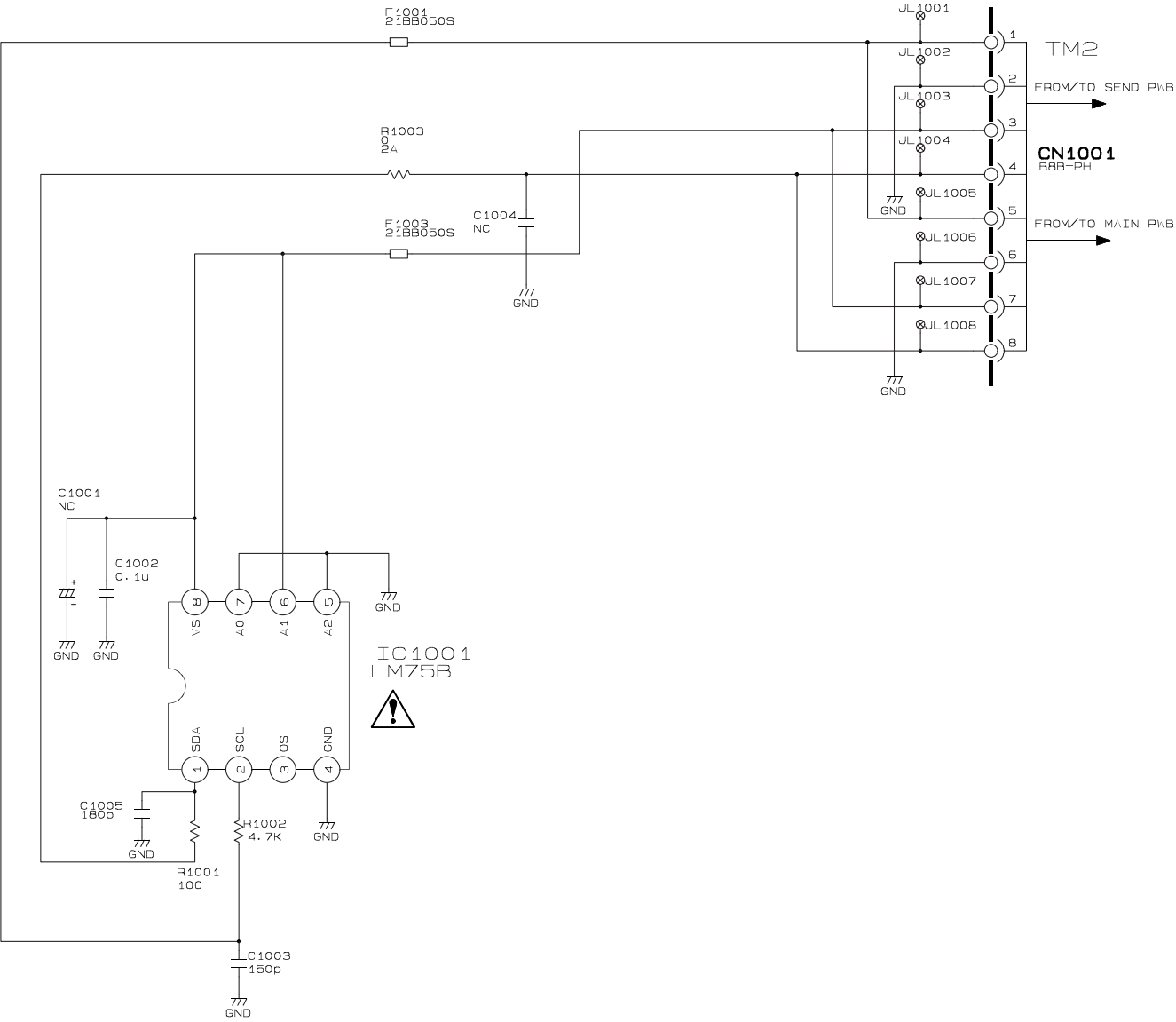
B

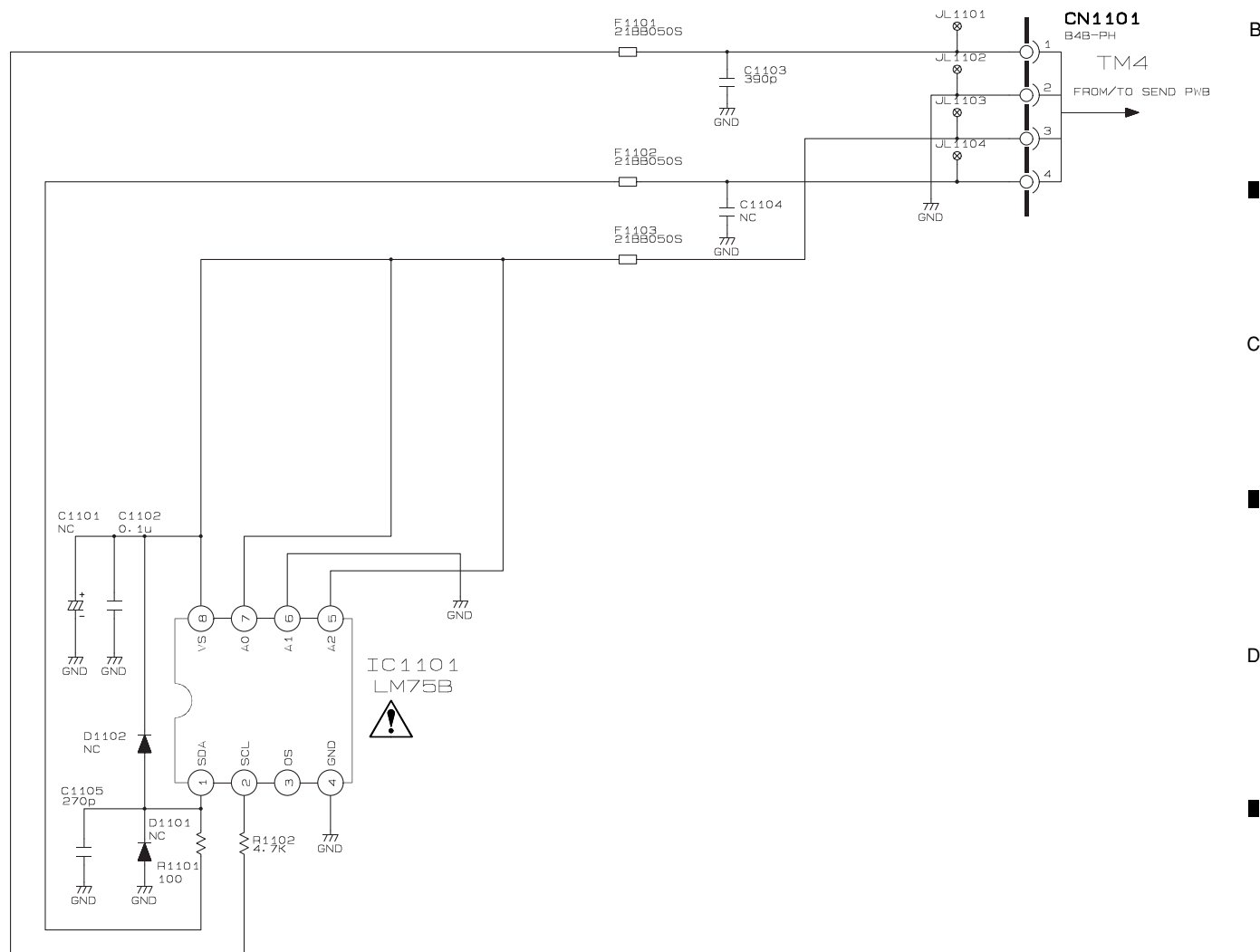
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7.18 SEND ASSY

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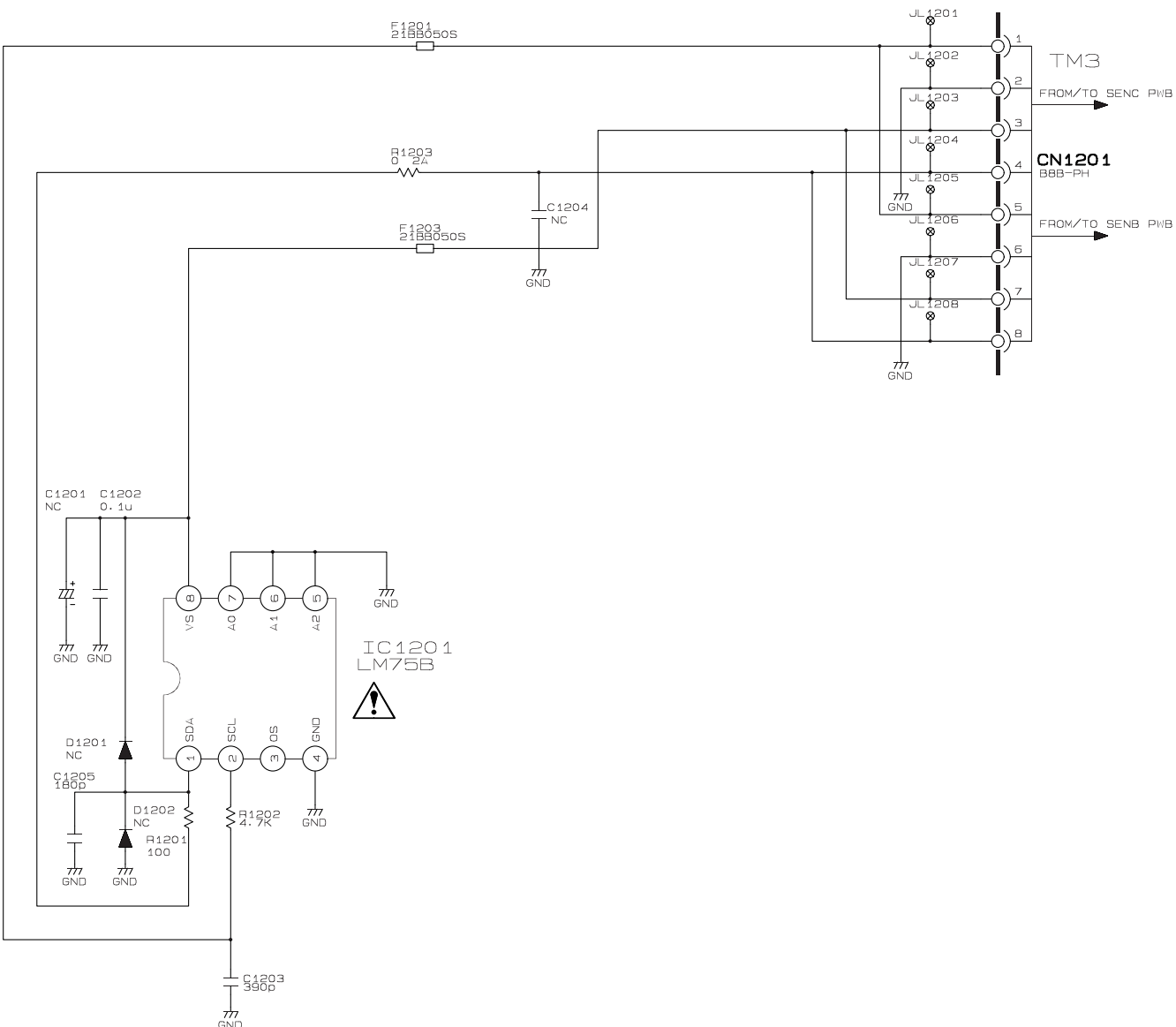
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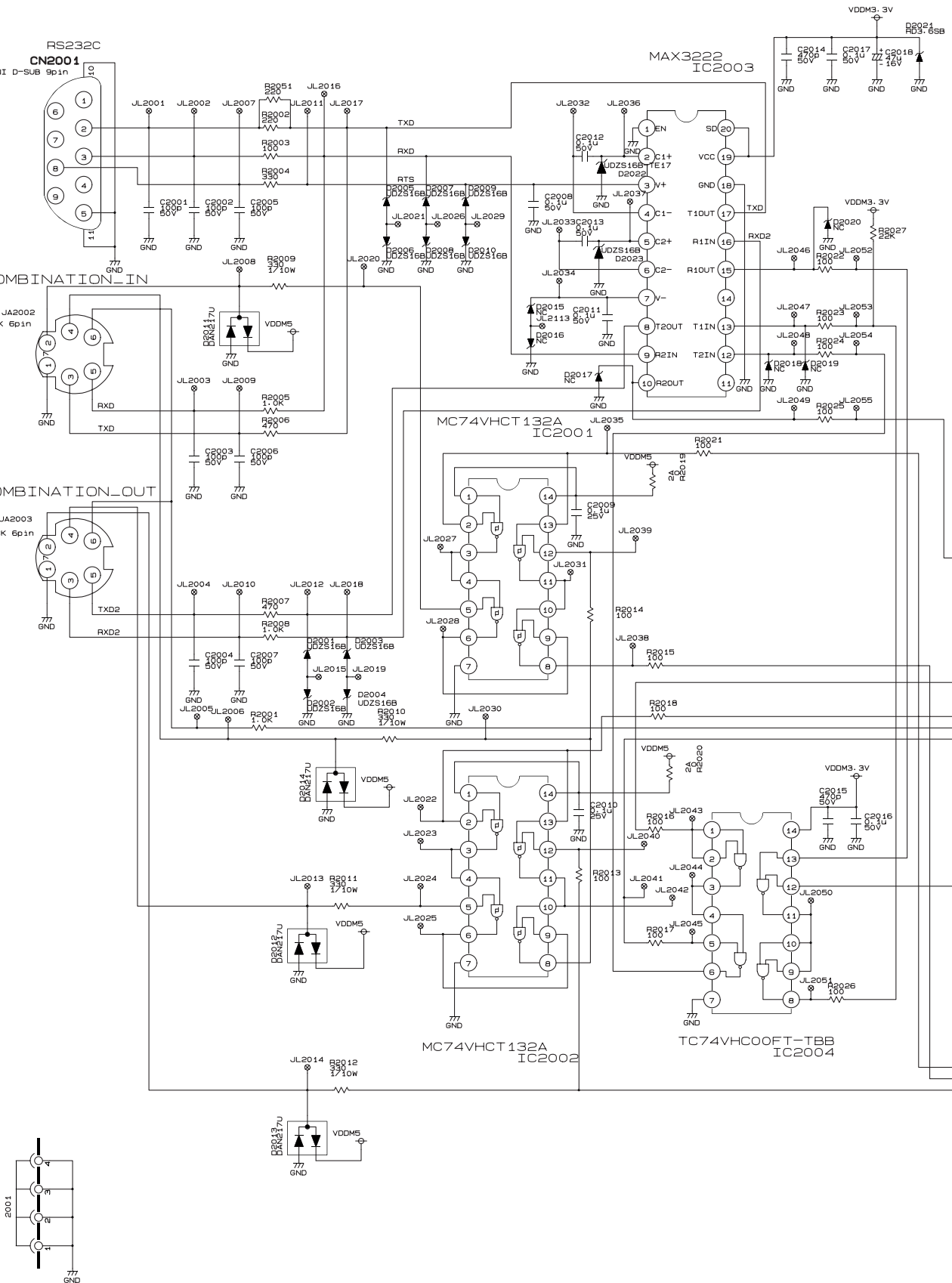
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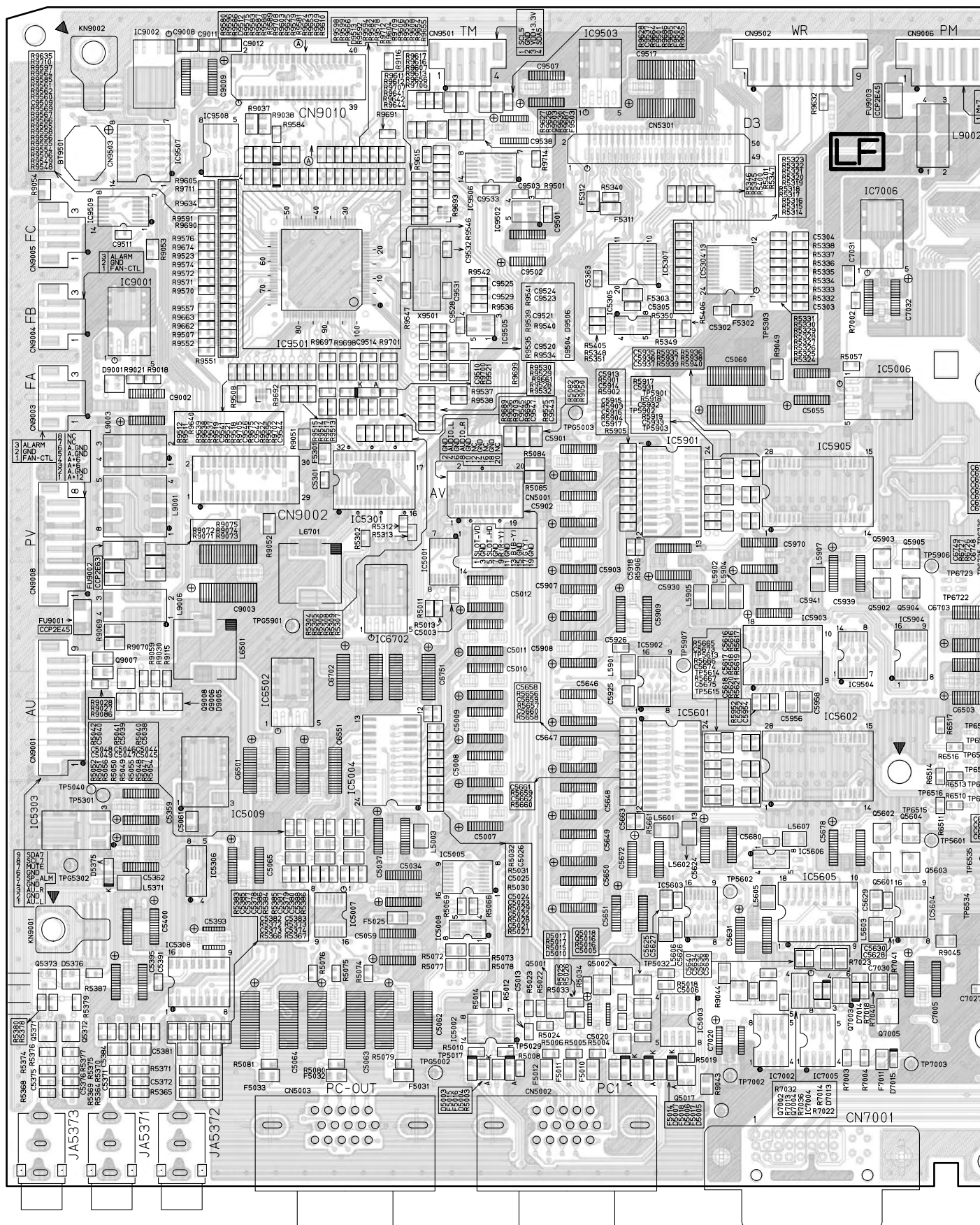
PDP-42MXE20

# 7.19 COMM SLOT ASSY





## MAIN ASSY





A

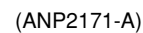
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**F**





## MAIN ASSY

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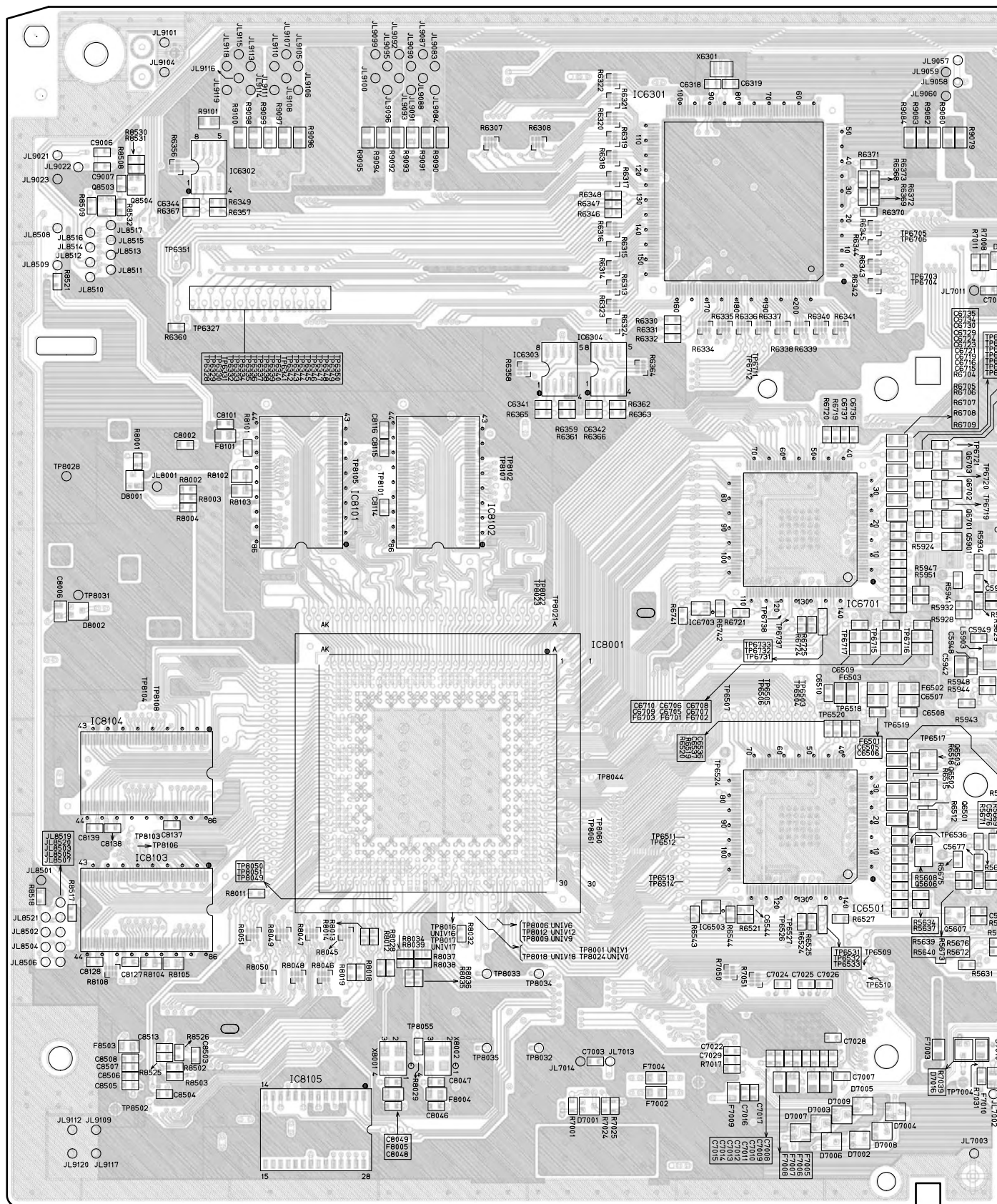
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